GATEWAY TECHNICAL COLLEGE

Catalog of Record 2026-2027



OWN YOUR FUTURE

For current policies and procedures, please view the 2026-2027 Student Handbook.

To provide equal employment, advancement, and learning opportunities to all individuals, employment and student admission decisions at Gateway will be based on merit, qualifications, and abilities. Gateway will not discriminate against any employee, applicant for employment, student or applicant for admission on the basis of race, color, national origin, ancestry, sex, sexual orientation, creed, religion, political affiliation, marital status, parental status, pregnancy, disability, age, membership in any reserve component of the armed forces, union affiliation, or any other protected category under applicable federal law (link is external) and state law (link is external), including but not limited to Title IX, Title VI/VII, and the Wisconsin Fair Employment Act, including protections for those opposing discrimination or participating in any resolution process on campus or within the Equal Employment Opportunity Commission or other human rights agencies.

As a recipient of federal financial assistance for education activities, Gateway is required by Title IX of the Education Amendments of 1972 to ensure that all of its education programs and activities do not discriminate on the basis of sex/gender. Sex includes biological sex, sex stereotypes, gender identity, gender expression, sexual orientation, and pregnancy and related conditions. Gateway also prohibits retaliation against any person opposing discrimination or participating in any discrimination investigation or complaint process internal or external to the institution.
Sex-based harassment, sexual assault, dating and domestic violence, and stalking are forms of sex discrimination, and are prohibited under Title IX and by Gateway policy. Any member of the campus community, guest, or visitor who acts to deny, deprive, or limit the educational, employment, residential, or social access, opportunities and/or benefits of any member of the Gateway community on the basis of sex or any other protected class listed above is in violation of Gateway's policy on Equal Opportunity, Civil Rights, and Sexual Harassment. Any person may report sex and other types of discrimination and harassment (whether or not the person reporting is the person alleged to have experienced the conduct), in person, by mail, by telephone, by video, or by email, using the contact information listed for the Title IX Coordinator (below). A report may be made at any time (including during non-business hours) by filing a report at gtc.edu/safety or sending an email. You can locate a full copy of Gateway's Equal Opportunity, Civil Rights, and Sexual Harassment policy at gtc.edu/eeo and gtc.edu/TitleIX.

Josh Vollendorf, MSE, PHR
Director of Compliance/Title IX Coordinator
Kenosha Campus, Administration Center
3520 30th Ave, Kenosha, WI 53144
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Information is subject to change and reflects material of record as of March 1, 2026. Updated information will be posted to appropriate locations on Gateway's website gtc.edu. Published by the Marketing & Communications Department, Gateway Technical College.

Accommodations: If you need special accommodations, please contact Gateway's Disability Support Services department:

Elkhorn Campus: 262-564-2683
Kenosha Campus: 262-564-2006
Racine Campus: 262-564-2103

Deaf/Hard of Hearing Services:
Office: 262-564-2564
(Voice) Cell/Text: 262-960-1931
Wisconsin Relay System: 711
Email: sadowskil@gtc.edu

Special Notices

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for a period of two years or take more than one year to complete.

Tuition and material fees are determined by the Board of the Wisconsin Technical College System. Please consult the Gateway website **gtc.edu** for exact fee amounts.

Occasionally, the District may offer a particular course out of published sequence. By doing so, the District does not obligate itself to offer succeeding courses out of published sequence.

Course materials listed in this catalog were effective for the 2026-2027 academic year.

Course descriptions are merely general summaries of various courses which may be offered at Gateway Technical College during the 2026-2027 academic year. Gateway reserves the right to modify course content at any time and to cancel any tentatively scheduled course due to low enrollment. Course descriptions were accurate as of March 1, 2026. Some courses offered by Gateway Technical College require successful completion, concurrent enrollment, or waiver.

Some courses offered by Gateway Technical College have enrollment which is restricted to persons formally accepted for admission into specific programs.

Course Descriptions

001-103
Permaculture Design Certification
Credits: 3.00
Permaculture draws from several disciplines including organic farming, agroforestry, integrated farming, sustainable community development, alternative/natural building and applied ecology. This course will teach participants techniques to reduce dependence on fossil fuels and increase the long term sustainability of their homes and communities. Integrating organic food production into urban landscapes is a major focus of the course. Students will receive a Permaculture Design Certificate upon successful completion of the course and a design project.

001-104
Greenhouse Systems
Credits: 3.00
Identify greenhouse structural components and environmental controls such as heating, cooling and lighting systems. Plan production cycles, describe how new plants are selected from plant breeders and obtained from suppliers. Assemble a hydroponic system from start to finish. Learn to identify, propagate and care for foliage plants, bulbs and flowering greenhouse crops. Participate in field trips to greenhouse operations. PREREQUISITES: Complete course 001-151 - Greenhouse Crops minimum grade C-

001-105
Dendrology and Silvics
Credits: 3.00
Students explore how trees interact with their environment and with one another, at different spatial and temporal scales. Concepts developed in botany and ecology are further examined with an emphasis on woody plant classification and the life history and characteristics of forest trees. Skills acquired through this course are tree identification and the ability to identify where different tree species thrive. PREREQUISITES: Complete course 001-118 - Landscape Plant Identification TAKE 801-136 - English Composition 1 Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

001-110
Tree Growth and Development
Credits: 2.00
Students examine the biology of tree systems and explore tree growth and development. Compartmentalization of wounds and adaptation of trees to their surroundings and environment are emphasized. Through participation in this course, students will acquire a framework for arboriculture.

001-111
Horticulture Practicum
Credits: 3.00
Work independently, or in small groups, with instructors and staff to gain in depth knowledge and experience in one of five program specialty areas; greenhouse growing, floral retailing and events, trial and display gardens, urban farm. Can also be used for internships with horticulture employers. PREREQUISITES: Course 001-147 - Soils and Plant Nutrition and 001-151 - Greenhouse Crops with a minimum grade of C-

001-113
Ornamental Plant Health Care
Credits: 3.00
This course focuses on classification and identification of ornamental plant insects, diseases, and injury caused by non-living agents. Students will examine the methods by which living organisms and non-living environmental factors cause plant damage. Skills in diagnostics, damage assessment, sample preparation, and control strategies are acquired. PREREQUISITES: Complete course 001-105 - Dendrology and Silvics TAKE 001-118 - Landscape Plant Identification Take 001-189 - Plant Health Care & Treatments OR 001-188

001-117
Landscape Design/Advanced
Credits: 3.00
Advanced study of landscaping designed to fine-tune landscape drawing techniques. Course focuses on landscape construction methods, Japanese-style design principles, designing for energy conservation and how to attract wildlife. Labs include drawing

plans and blueprinting. PREREQUISITES: Course 001-140 - Landscape Design/Introduction

001-118
Landscape Plant Identification
Credits: 2.00
This course introduces students to woody shrub and tree identification of species commonly used in Wisconsin commercial and residential landscapes. Students develop techniques and basic skills necessary for plant identification and learn the cultural practices required to grow healthy woody plants.

001-122
Horticulture Business Operations
Credits: 3.00
Simulated operation of horticulture industries utilizing principles of marketing, economics and office management. Includes hands-on practice on computers used in each branch of the horticulture industry. Field trips and practice work are involved. PREREQUISITES: Take 001-136 - Landscape Management; Take 001-160 - Landscape Construction and Enhancements

001-124
Fundamentals of Aerial Tree Work
Credits: 2.00
Students examine the basic safety requirements, equipment, and techniques employed by arborists who work aloft. Using rope-and-harness and an aerial lift, students develop the skills to conduct aerial arboriculture (tree care). An emphasis is placed on recognizing electrical hazards, tying knots, tree ascension, limb walking, and maneuvering through the tree canopy. Students who choose to remain on the ground learn the skills to assist a climber working aloft.

001-128
Horticulture Marketing
Credits: 3.00
Learn how plants and flowers are marketed locally and internationally. This class offers professional marketing techniques for garden centers, greenhouses and floral shops. Students visit garden centers, flower shops, wholesale suppliers and trade markets to identify trends and meet with managers. Students gain practical experience organizing a plant promotion including identifying the customer, purchasing and pricing plants, and advertising.

001-129
Pesticide Applicator Certification
Credits: 1.00
Learn how to apply pesticides safely and legally. This class prepares students to take the Wisconsin State pesticide applicator exam with the certification exam given during class. Anyone applying chemicals to someone else's property is required to obtain this certification.

001-130
Landscape Plants Trees/Shrubs Deciduous
Credits: 3.00
Study of deciduous trees, shrubs, and vines grown for landscape use in residential and commercial settings. Examines environmental requirements, dormant characteristics, and landscape applications. Labs involve on-site identification of plant material. PREREQUISITES: Complete course 001-185 - Introduction to Horticulture with minimum grade C-

001-132
Landscape Plants Evergreen
Credits: 3.00
Continued emphasis on identification and evaluation of landscape plants with emphasis on evergreen landscape materials. PREREQUISITES: Take 001-185 - Introduction to Horticulture; Minimum Grade C-

001-133
Chainsaw Safety and Operation
Credits: 2.00
Students acquire the skills to safely operate a chainsaw in the arboricultural industry. Emphasis is placed on identifying the importance and adopting the methods of personal protective equipment, safe chainsaw operation, routine maintenance, and common chainsaw cutting techniques in accordance with best management practices and current industry standards. Students will develop chainsaw skills in a variety of field exercises that focus on techniques used in tree pruning and removal, including the bypass cut, open face notching, bore cutting, and wedging.

001-136
Landscape Management
Credits: 3.00
Maintenance of industrial, public, institutional, and private grounds. Also covers operation and management of an ornamental nursery. Labs include pruning, balling and burlapping, procedures for preventing winter injury, and field trips.

001-140
Landscape Design/Introduction
Credits: 3.00
Covers how to plan and draw a professional landscape design. Focuses on selecting correct plant material, proper placement, and uses of landscape construction elements. Practical design and drawing experience provided in lab. PREREQUISITES: Take 001-143 - Herbaceous Plants; Minimum Grade C-; Take 001-146 - Sustainable Landscape; Minimum Grade C-; COREQUISITES: Take 001-130 - Landscape Plants Trees/Shrubs Deciduous Minimum Grade C-;

001-142
Vegetable Science
Credits: 3.00
Students will study methods of vegetable gardening and become familiar with basic annual and perennial vegetables, herbs and edible flowers. Organic growing methods, composting, pest and disease control, and self-sustaining gardening methods will be discussed in detail. Field trips to local market gardens will be included in the course.

001-143
Herbaceous Plants
Credits: 3.00
Learn to identify and care for annual and perennial flowering plants. Visit local gardens and professional sites to study plants and view design styles. Graphic skills used to create professional flower bed designs are also taught. Hands-on experience propagating annuals and perennials and working with tropical foliage in the Gateway greenhouse is also included. COREQUISITES: Complete 001-185 - Introduction to Horticulture

001-144
Floral Design I/Commercial
Credits: 3.00
The basic principles, elements, and mechanics of floral design are practiced. Identification, care and handling of flowers and foliage will be involved. Includes hands-on designing of corsages, primary arrangements and holiday arrangements.

001-146
Sustainable Landscape
Credits: 1.00
Following guidelines set forth by the national Sustainable Site's Initiative students will learn how to improve the sustainability of urban landscapes. Identifying soil conditions, capturing storm water, using native plants, composting, waste and energy management are concepts learned in this class. Students have the opportunity to analyze their own property to find ways to improve sustainability while reducing chemical inputs and maintenance needs.

001-147
Soils and Plant Nutrition
Credits: 1.00

Students will study physical, chemical and biological properties of soils. Soil conservation practices, plant nutrition and composting will be discussed in detail. Labs involve soil testing and soil improvement.

001-148
Plant Pests and Beneficials
Credits: 1.00
Learn to identify the different lifecycle stages of plant pests in the greenhouse and landscape and how to control them using cultural, physical and biological control methods. Learn about beneficial insects and how to use predators, parasites and pathogens to control insects and diseases of plants.

001-149
Horticulture Events
Credits: 3.00
Educational seminars and workshops, celebrations, tours and travel are increasingly important to garden centers, botanic gardens and resorts. Learn to plan and organize horticulture and floral events from the initial planning stages through set up to break down and billing.

001-150
Floristry
Credits: 3.00
Practice skills learned in Floral Design 1 and expand knowledge to include: flower care and handling, visual merchandising and display, pricing floral products and services, customer service and sales, employee relations, specialty cut flowers and using local flowers, the wholesale and international floral trade. PREREQUISITES: Course 001-144 - Floral Design I/Commercial with a minimum grade of C or TR;

001-151
Greenhouse Crops
Credits: 3.00
Focuses on growing cut flowers, potted plants and foliage plants in a greenhouse. Provides practical experience in growing/maintaining crops using equipment and solving problems. Includes field trips to commercial greenhouse operations.

COREQUISITES: Complete course 801-136 - English Composition 1 Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

001-154
Alternative Growing Methods
Credits: 3.00
Students will study emerging growing methods that are 'outside the box'. These include vertical wall gardening, green roots, hydroponics, aquaponics, and other innovative growing techniques. PREREQUISITES: Complete course 001-104 - Greenhouse Systems or 001-140 - Landscape Design/Introduction with minimum grade C -; TAKE 001-151 - Greenhouse Crops; MINIMUM GRADE C-, TR;

001-156
Tree Care Practicum 1
Credits: 2.00
In this course, students examine ground and work site management, aerial rescue, and electrical hazard awareness. Building on acquired tree work skills, students develop occupational skills required by professional arborists. Students identify tree pruning needs, create a work plan to ascend the tree, and achieve the established goals. Students may complete the requirements of the course from aloft or from the ground. Upon completion of the course, students will be prepared to apply [basic] tree care methods, techniques, and behaviors of professional arborists. PREREQUISITES: Complete the following course 001-124 - Fundamentals of Aerial Tree Work minimum Grade C-

001-157
Tree Care Practicum 2
Credits: 2.00
In this course, students build on tree work skills acquired in Tree Care Practicum 1. In an urban setting, students practice supporting and conducting technical aerial tree removal. Students identify: methods of safe tree removal, aerial felling of branches, placement and use of rigging equipment, and chainsaw use in a tree. Safe and effective rigging operation techniques are emphasized. Methods to increase crew efficiency and support aerial crew members are presented and practiced. Upon

completion of the course, students will be prepared to support and conduct aerial tree removal. PREREQUISITES: Complete course 001-156 - Tree Care Practicum 1 with a minimum grade C

001-159
3D Landscape Rendering
Credits: 1.00
In this course, learners will take their landscape designs to the next level and bring them to life for clients with the use of 3D modeling software. This course is intended to build on skills gained in Advanced Landscape Design with the use of Dynsacape software. Learners will explore and learn how to analyze, design, and represent landscapes through SketchUp as 3D modeling software. Upon completion of this course, learners will be able to integrate advanced landscape design skills and technologies to communicate an enhanced presentation to a client or clients. COREQUISITES: Take 001-117 - Landscape Design/Advanced

001-160
Landscape Construction and Enhancements
Credits: 3.00
In this course, learners examine the principles of landscape features in the built environment focusing on hardscapes, low voltage lighting, and irrigation. Learners practice constructing, installing, and troubleshooting problems hands-on. They explore industry techniques by interpreting drawings, analyzing manufacturers' specifications, as well as, identifying and allocating structural components. Learners explore construction safety practices that regulate the landscape environment in which they will work. Upon successful completion of the course, learners will be able to create sustainable features intended to enhance the built environment. PREREQUISITES: Take 001-111 - Horticulture Practicum; Minimum Grade C

001-173
Urban Tree Maintenance
Credits: 2.00
Students explore and develop skills in the art and science of tree pruning. Young tree training and mature tree maintenance are emphasized. Learners use tree pruning techniques and follow safety requirements set by current industry standards.

001-180
Horticulture Portfolio
Credits: 1.00
This capstone course will provide horticulture students with the opportunity to pull together portfolio elements created in several classes into a cohesive professional portfolio for use when starting the career search. The portfolio will include samples of work, letters of reference, resume, horticultural resources and other pertinent career search and employment information, which can be used during employment interviews. Students will develop a high-quality professional portfolio as the final project. PREREQUISITES: Take 001-130 - Landscape Plants Trees/Shrubs Deciduous; Minimum Grade C-, TR; Take 001-143 - Herbaceous Plants; Minimum Grade C-,TR; Take 001-147 - Soils and Plant Nutrition; Minimum Grade C-,TR; Take 001-151 - Greenhouse Crops; Minimum Grade C-,TR

001-181
Advanced Studies - Plant Biology
Credits: 1.00
Students examine plant biology with emphasis on growth, reproduction, and cellular morphological and physiological processes. PREREQUISITES: Complete course 806-184 with a minimum grade of C

001-183
Applied Urban Forestry
Credits: 2.00
Students acquire skills in techniques, tools, and pieces of equipment used to manage trees and tree populations that make up the urban forest. Students will explore tree inventory practices and pruning cycles used to maintain a city tree population. Students will also identify and examine the necessity of tree species diversity within urban environments. This course further explores arboricultural career options available from commercial, municipal, and utility employers. PREREQUISITES: Complete courses 001-105 - Dendrology and Silvics TAKE 001-110 - Tree Growth and Development TAKE 001-173 - Urban Tree Maintenance

001-184
Ecological Basis for Natural Res Mgmt
Credits: 3.00
Students explore the basic principles of ecology and examine their application in the management of natural resources. Exploration of the scientific method and interactions between and amongst species are emphasized. Students will acquire hands-on skills with measurements and data collection, research, preparation of technical reports, and use of computer models.

001-185
Introduction to Horticulture
Credits: 3.00
Students examine the science and profession of horticulture, including its role and importance throughout history, current trends, and careers. Learners will identify horticulture crops, crop use and interrelationships among the environment, plant growth, and plant development.

001-186
People, Resources, and Sustainability
Credits: 3.00
Students examine the relationship between the human population and natural resources over time, and the effect of that relationship on sustainability. Global resources, environmental concerns, and the human dimensions of resource management are explored from biological, socioeconomic, and sustainability perspectives.

001-189
Plant Health Care & Treatments
Credits: 2.00
In this course, students examine insect and pest problems associated with the urban landscape. They analyze plant healthcare issues and identify methods of providing treatment through invasive and non-invasive practices. The learners explore the difference between invasive and non-invasive treatment strategies. Upon completion of

this course, the learners will be able to implement plant health care treatment strategies for common insect, disease, and abiotic issues in the Midwest.

001-190
Arboriculture Capstone
Credits: 2.00
In this course, students integrate occupational skills with professional practice. Students examine tree care operations, communications, and planning by engaging in opportunities to report work performed, manage resources, and apply communication and interpersonal skills to a variety of occupational situations. Upon completion of the course, students will be able to explain safe work practices and to effectively lead work activities. Additionally, students will be able to provide clients with ethical and appropriate tree care recommendations. PREREQUISITES: Take 001-157 - Tree Care Practicum 2 Take 001-105 - Dendrology and Silvics

001-191
Leadership & Teamwork in Tree Care
Credits: 1.00
This course exposes apprentices to aspects associated with the processes of effective and impactful training. Apprentices explore a diversity of personality characteristics, learning styles and the process of learning, communication skills, creating effective teams, and approaches to assessing learning. This course includes a capstone project of creating a plan to train an arborist skill to a diversity of arborist trainees.

001-198
Introduction to Soil & Water Resources
Credits: 3.00
Students explore integrated concepts of soil and water resources at the landscape level. The course examines how physical, chemical, and biological interactions relate to watershed processes, and how these interactions respond to land use and management. PREREQUISITES: Complete course 001-184 - Ecological Basis for Natural Res Mgmt TAKE 001-185 - Introduction to Horticulture TAKE 001-186 - People, Resources, and Sustainability

001-199
Intro to Fish, Forestry, & Wildlife Res
Credits: 3.00
Students investigate the framework for fundamental natural resource disciplines by examining the principles and practices of fisheries, forest management, and wildlife management. This course also examines how goods can be produced and services provided while maintaining ecosystem integrity and functions.

091-101
Animal Care and Management
Credits: 3.00
In this course, students explore basic nutrition, housing needs, and behavior of common domestic animals to develop skills that enable them to assess animal condition. Upon completion of this course, students will be able to obtain a thorough history, perform a physical exam, administer medications, collect samples, and use proper restraint techniques COREQUISITES: Course 806-105 - Principles of Animal Biology Take 091-120 - Animal Behavior;

091-102
Veterinary Business Practices
Credits: 3.00
In this course, students develop practical workplace techniques for veterinary office procedures to develop customer service and veterinary team support skills. Upon completion of this course, students will be able to use veterinary software to manage records and financial applications, maximize client interactions, and participate in day-to-day operations of a veterinary facility. COREQUISITES: Course 091-101 - Animal Care and Management

091-103
Clinical Pathology I for Vet Sciences
Credits: 4.00
In this course, students examine basic laboratory equipment and procedures, as well as features of common veterinary diseases, to acquire skills needed to perform various diagnostic tests. Upon completion of this course, students will be able to collect and process appropriate samples for hematology, blood chemistry, urinalysis, and

parasitology, and correlate veterinary clinical pathology findings to clinical signs. PREREQUISITES: Course 806-105 - Principles of Animal Biology with a minimum grade of B Take 091-101 - Animal Care and Management; Minimum Grade C,TR,PR; Take 091-102 - Veterinary Business Practices; Minimum Grade C,TR,PR;

091-104
Clinical Pathology II for Vet Sciences
Credits: 4.00
In this course, students examine additional laboratory procedures and other veterinary disease processes to establish understanding of appropriate methodology and recognition of accurate results. Upon completion of this course, students will be able to collect and process appropriate samples for mycology, cytology, serology, endocrinology, and coagulation and reproductive evaluations, and correlate veterinary clinical pathology findings to clinical signs. COREQUISITES: Complete courses 091-108 - Veterinary Pharmacology and 806-197 - Microbiology

091-105
Surgical Procedures I for Vet Sciences
Credits: 3.00
In this course, students investigate surgical equipment and procedures to develop skills needed to assist with surgical care of animals. Upon completion of this course, students will be able to identify surgical instruments, develop sterile technique, maintain and operate surgical equipment, and assist with patient preparation, monitoring, and recovery. COREQUISITES: Course 091-103 - Clinical Pathology I for Vet Sciences

091-106
Surgical Procedures II for Vet Sciences
Credits: 3.00
In this course, students explore the veterinary technician's role in surgery to develop skills needed to manage veterinary patients in the pre-, intra-, and post-operative phases. Upon completion of this course, students will be able to anticipate needs of the surgeon, provide veterinary surgical assistance, manage wounds and incisions, and perform dental prophylaxis in dogs and cats. PREREQUISITES: Complete course 091-108 - Veterinary Pharmacology Take 091-110 - Clinical Skills I for Vet Sciences COREQUISITES: Take 091-113 - Anesthesia for Veterinary Technicians

091-107
Imaging for Veterinary Sciences
Credits: 3.00
In this course, students explore veterinary imaging concepts and apply veterinary imaging techniques to use radiographic equipment and support diagnostic studies. Upon completion of this course, students will be able to properly position veterinary patients, produce diagnostic images, process exposed films, and maintain equipment. COREQUISITES: Course 091-103 - Clinical Pathology I for Vet Sciences

091-108
Veterinary Pharmacology
Credits: 3.00
In this course, students examine drugs, vaccines, and other substances used in veterinary medicine to establish a knowledge base of their therapeutic use, administration, and side effects. Upon completion of this course, students will be able to accurately calculate dosages, prepare dispensed medications, safely administer drugs, and recognize normal and abnormal responses to medications. PREREQUISITES: Course 834-109 - Pre-Algebra with a minimum grade of C or TR or achieve the required placement test score COREQUISITES: Course 091-110 - Clinical Skills I for Vet Sciences

091-109
Lab Animals and Non-Traditional Pets
Credits: 2.00
In this course, students explore characteristics, basic care, illness, and treatment of animals that may be encountered in research settings and/or kept as pets, to develop skills needed to participate in caring for these animals. Upon completion of this course, students will be able to properly restrain and examine mice, rats, rabbits, and birds, collect blood samples from rats and rabbits, and perform a necropsy on a laboratory animal. PREREQUISITES: Take 091-106 - Surgical Procedures II for Vet Sciences Take 091-113 - Anesthesia for Veterinary Technicians

091-110
Clinical Skills I for Vet Sciences
Credits: 2.00
In this course, students assimilate skills in a clinical setting to develop proficiency in animal nursing techniques. Upon completion of this course, students will be able to perform routine veterinary clinic procedures such as venipuncture, urine collection, and subcutaneous injection. PREREQUISITES: Complete course 801-136 - English Composition 1

091-111
Clinical Skills II for Vet Sciences
Credits: 2.00
In this course, students further assimilate skills in a clinical setting to develop proficiency in animal nursing techniques. Upon completion of this course, students will be able to perform more complex clinical procedures such as monitor patients in the anesthetic and recovery periods, properly restrain small animals, and prepare patients for surgery. PREREQUISITES: Course 091-110 - Clinical Skills I for Vet Sciences with a minimum grade of C or TR

091-112
Clinical Skills III for Veterinary Sci
Credits: 3.00
In this course, students assimilate higher level skills in a clinical setting to develop proficiency in animal nursing techniques for veterinary technicians. Upon completion of this course, students will be able to place and care for intravenous catheters, administer intravenous and intramuscular injections, administer enemas, and apply and remove bandages and splints. PREREQUISITES: Course 091-106 - Surgical Procedures II for Vet Sciences with a minimum grade of C or TR

091-113
Anesthesia for Veterinary Technicians
Credits: 3.00
In this course, students investigate anesthetic delivery and monitoring equipment, pain management strategies, and appropriate responses to patient compromise to acquire skills needed to coordinate anesthetic events in veterinary patients. Upon completion of this course, students will be able to choose and administer appropriate veterinary

anesthetic protocols, monitor and maintain patient status throughout anesthetic events, and maintain equipment and accurate anesthetic records. PREREQUISITES: Complete courses 091-108 - Veterinary Pharmacology Take 091-110 - Clinical Skills I for Vet Sciences COREQUISITES: Course 091-106 - Surgical Procedures II for Vet Sciences

091-114
Veterinary Tech Clinical Internship
Credits: 4.00
In this course, students hone animal nursing skills in a clinical setting to achieve proficiency needed to function in the role of veterinary technician according to the standards set by CVTEA. Upon completion of this course, students will have the skills and knowledge required of an entry level veterinary technician. PREREQUISITES: Take 091-106 - Surgical Procedures II for Vet Sciences Take 091-113 - Anesthesia for Veterinary Technicians

091-120
Animal Behavior
Credits: 1.00
In this course, students consider normal and abnormal animal behavior, training methods, and the relationship between behavior and physical health to identify problem behaviors and potential solutions. Upon completion of this course, students will be able to recognize some behavior issues in domestic animals and choose appropriate resources for their modification. PREREQUISITES: Students must be accepted to either the 10-091-1 Veterinary Technician or 31-091-3 Veterinary Assistant programs to be eligible to register for this course.

091-123
Veterinary Medical Terminology
Credits: 2.00
In this course, students explore the construction, meaning, and pronunciation of veterinary medical terms to establish understanding and facilitate communication among veterinary team members. Upon completion of this course, students will be able to correctly formulate veterinary medical terms to describe specific concepts. PREREQUISITES: Students must be accepted to either the 10-091-1 Veterinary

Technician or the 31-091-3 Veterinary Assistant programs to be eligible to register for this course.

091-124
Large Animal Care & Medicine
Credits: 3.00
In this course, students examine the care, handling, and restraint of large animals commonly encountered in veterinary practice. They explore the basic nutrition, common diseases, housing, and behavior of a variety of large animals, including equine, bovine, porcine, caprine, and ovine. Upon completion of the course, students will be able to assess animal conditions, administer medications, collect samples, and use proper restraint techniques. PREREQUISITES: Take 091-108 - Veterinary Pharmacology Take 091-110 - Clinical Skills I for Vet Sciences

091-125
Common Diseases of Domestic Animals
Credits: 2.00
In this course, students explore basic pathogenesis, diagnosis, and treatment of common domestic animal diseases. They examine symptoms, transmission, prevention, and reporting requirements. Upon completion of the course, students will be able to identify and assess common disease presentations in domestic animals. PREREQUISITES: Take 091-106 - Surgical Procedures II for Vet Sciences Take 091-113 - Anesthesia for Veterinary Technicians Take 091-124 - Large Animal Care & Medicine

098-101
Animal Care and Management
Credits: 3.00
In this course, students explore basic nutrition, housing needs, and behavior of common domestic animals to develop skills that enable them to assess animal condition. Upon completion of this course, students will be able to obtain a thorough history, perform a physical exam, administer medications, collect samples, and use proper restraint techniques COREQUISITES: Course 806-105 - Principles of Animal Biology Take 091-120 - Animal Behavior OR 098-120 - Animal Behavior;

098-102
Veterinary Business Practices
Credits: 3.00
In this course, students develop practical workplace techniques for veterinary office procedures to develop customer service and veterinary team support skills. Upon completion of this course, students will be able to use veterinary software to manage records and financial applications, maximize client interactions, and participate in day-to-day operations of a veterinary facility. COREQUISITES: Course 091-101 - Animal Care and Management OR 098-101 - Animal Care and Management

098-103
Clinical Pathology I for Vet Sciences
Credits: 4.00
In this course, students examine basic laboratory equipment and procedures, as well as features of common veterinary diseases, to acquire skills needed to perform various diagnostic tests. Upon completion of this course, students will be able to collect and process appropriate samples for hematology, blood chemistry, urinalysis, and parasitology, and correlate veterinary clinical pathology findings to clinical signs. PREREQUISITES: Course 806-105 - Principles of Animal Biology with a minimum grade of B Take 091-101 - Animal Care and Management OR 098-101 - Animal Care and Management; Minimum Grade C,TR,PR; Take 091-102 - Veterinary Business Practices OR 098-102 - Veterinary Business Practices; Minimum Grade C,TR,PR;

098-104
Clinical Pathology II for Vet Sciences
Credits: 4.00
In this course, students examine additional laboratory procedures and other veterinary disease processes to establish understanding of appropriate methodology and recognition of accurate results. Upon completion of this course, students will be able to collect and process appropriate samples for mycology, cytology, serology, endocrinology, and coagulation and reproductive evaluations, and correlate veterinary clinical pathology findings to clinical signs. COREQUISITES: Complete course 806-197 - Microbiology Take 091-108 - Veterinary Pharmacology OR 098-108 - Veterinary Pharmacology;

098-105
Surgical Procedures I for Vet Sciences
Credits: 3.00
In this course, students investigate surgical equipment and procedures to develop skills needed to assist with surgical care of animals. Upon completion of this course, students will be able to identify surgical instruments, develop sterile technique, maintain and operate surgical equipment, and assist with patient preparation, monitoring, and recovery. COREQUISITES: Course 091-103 - Clinical Pathology I for Vet Sciences OR 098-103 - Clinical Pathology I for Vet Sciences

098-106
Surgical Procedures II for Vet Sciences
Credits: 3.00
In this course, students explore the veterinary technician's role in surgery to develop skills needed to manage veterinary patients in the pre-, intra-, and post-operative phases. Upon completion of this course, students will be able to anticipate needs of the surgeon, provide veterinary surgical assistance, manage wounds and incisions, and perform dental prophylaxis in dogs and cats. PREREQUISITES: Complete course 091-108 - Veterinary Pharmacology OR 098-108 - Veterinary Pharmacology Take 091-110 - Clinical Skills I for Vet Sciences OR 098-110 - Clinical Skills I for Vet Sciences COREQUISITES: Take 091-113 - Anesthesia for Veterinary Technicians OR 098-113 - Anesthesia for Veterinary Technicians

098-107
Imaging for Veterinary Sciences
Credits: 3.00
In this course, students explore veterinary imaging concepts and apply veterinary imaging techniques to use radiographic equipment and support diagnostic studies. Upon completion of this course, students will be able to properly position veterinary patients, produce diagnostic images, process exposed films, and maintain equipment. COREQUISITES: Course 091-103 - Clinical Pathology I for Vet Sciences OR 098-103 - Clinical Pathology I for Vet Sciences

098-108
Veterinary Pharmacology
Credits: 3.00
In this course, students examine drugs, vaccines, and other substances used in veterinary medicine to establish a knowledge base of their therapeutic use, administration, and side effects. Upon completion of this course, students will be able to accurately calculate dosages, prepare dispensed medications, safely administer drugs, and recognize normal and abnormal responses to medications. PREREQUISITES: Course 834-109 - Pre-Algebra with a minimum grade of C or TR or achieve the required placement test score COREQUISITES: Course 091-110 - Clinical Skills I for Vet Sciences OR 098-110 - Clinical Skills I for Vet Sciences

098-109
Lab Animals and Non-Traditional Pets
Credits: 2.00
In this course, students explore characteristics, basic care, illness, and treatment of animals that may be encountered in research settings and/or kept as pets, to develop skills needed to participate in caring for these animals. Upon completion of this course, students will be able to properly restrain and examine mice, rats, rabbits, and birds, collect blood samples from rats and rabbits, and perform a necropsy on a laboratory animal. PREREQUISITES: Take 091-106 - Surgical Procedures II for Vet Sciences OR 098-106 - Surgical Procedures II for Vet Sciences Take 091-113 - Anesthesia for Veterinary Technicians OR 098-113 - Anesthesia for Veterinary Technicians

098-110
Clinical Skills I for Vet Sciences
Credits: 2.00
In this course, students assimilate skills in a clinical setting to develop proficiency in animal nursing techniques. Upon completion of this course, students will be able to perform routine veterinary clinic procedures such as venipuncture, urine collection, and subcutaneous injection. PREREQUISITES: Complete course 801-136 - English Composition 1

098-113
Anesthesia for Veterinary Technicians
Credits: 3.00

In this course, students investigate anesthetic delivery and monitoring equipment, pain management strategies, and appropriate responses to patient compromise to acquire skills needed to coordinate anesthetic events in veterinary patients. Upon completion of this course, students will be able to choose and administer appropriate veterinary anesthetic protocols, monitor and maintain patient status throughout anesthetic events, and maintain equipment and accurate anesthetic records. PREREQUISITES: Complete courses 091-108 - Veterinary Pharmacology OR 098-108 - Veterinary Pharmacology Take 091-110 - Clinical Skills I for Vet Sciences OR 098-110 - Clinical Skills I for Vet Sciences COREQUISITES: Course 091-106 - Surgical Procedures II for Vet Sciences OR 098-106 - Surgical Procedures II for Vet Sciences

098-114
Veterinary Tech Clinical Internship
Credits: 4.00
In this course, students hone animal nursing skills in a clinical setting to achieve proficiency needed to function in the role of veterinary technician according to the standards set by CVTEA. Upon completion of this course, students will have the skills and knowledge required of an entry level veterinary technician. PREREQUISITES: Take 091-106 - Surgical Procedures II for Vet Sciences OR 098-106 - Surgical Procedures II for Vet Sciences Take 091-113 - Anesthesia for Veterinary Technicians OR 098-113 - Anesthesia for Veterinary Technicians

098-120
Animal Behavior
Credits: 1.00
In this course, students consider normal and abnormal animal behavior, training methods, and the relationship between behavior and physical health to identify problem behaviors and potential solutions. Upon completion of this course, students will be able to recognize some behavior issues in domestic animals and choose appropriate resources for their modification. PREREQUISITES: Students must be accepted to either the 10-098-1 Veterinary Technician, 10-091-1 Veterinary Technician, 31-098-1 Veterinary Assistant, or 31-091-3 Veterinary Assistant programs to be eligible to register for this course.

098-123
Veterinary Medical Terminology
Credits: 2.00
In this course, students explore the construction, meaning, and pronunciation of veterinary medical terms to establish understanding and facilitate communication among veterinary team members. Upon completion of this course, students will be able to correctly formulate veterinary medical terms to describe specific concepts. PREREQUISITES: Students must be accepted to either the 10-098-1 Veterinary Technician, 10-091-1 Veterinary Technician. 31-098-3 Veterinary Assistant, or the 31-091-3 Veterinary Assistant programs to be eligible to register for this course.

098-124
Large Animal Care & Medicine
Credits: 3.00
In this course, students examine the care, handling, and restraint of large animals commonly encountered in veterinary practice. They explore the basic nutrition, common diseases, housing, and behavior of a variety of large animals, including equine, bovine, porcine, caprine, and ovine. Upon completion of the course, students will be able to assess animal conditions, administer medications, collect samples, and use proper restraint techniques. PREREQUISITES: Take 091-108 - Veterinary Pharmacology OR 098-108 - Veterinary Pharmacology Take 091-110 - Clinical Skills I for Vet Sciences OR 098-110 - Clinical Skills I for Vet Sciences

098-125
Common Diseases of Domestic Animals
Credits: 2.00
In this course, students explore basic pathogenesis, diagnosis, and treatment of common domestic animal diseases. They examine symptoms, transmission, prevention, and reporting requirements. Upon completion of the course, students will be able to identify and assess common disease presentations in domestic animals. PREREQUISITES: Take 091-106 - Surgical Procedures II for Vet Sciences OR 098-106 - Surgical Procedures II for Vet Sciences Take 091-113 - Anesthesia for Veterinary Technicians OR 098-113 - Anesthesia for Veterinary Technicians Take 091-124 - Large Animal Care & Medicine OR 098-124 - Large Animal Care & Medicine

101-103
Internship for Accounting
Credits: 2.00
This course is an on-the-job accounting related work experience. The student will perform 72 hours of accounting-related duties in a business, governmental or not-for-profit setting. Students are responsible for seeking and obtaining the internship workstation position (paid or unpaid). The student will make a summary of work activities. Job supervisor approval and instructor pre-approval are required. COREQUISITES: Complete course 101-121 - Intermediate Accounting

101-104
Income Tax Accounting
Credits: 4.00
In this course, learners explore basic federal and state income tax laws for personal income tax returns. Students will prepare manual and electronic Federal and Wisconsin individual tax returns, including supporting schedules. Students will also examine gross income, deductions, credits, capital gains/losses and other important current tax topics. Upon completion of the course, learners will be able to accurately complete personal income tax returns.

101-105
Accounting Career Readiness
Credits: 2.00
Accounting Career Readiness will prepare students for entry into the workforce. The student will develop a strategy for seeking, obtaining and retaining employment. The student will identify professional goals and develop a job search or job advancement career plan, resume, application letter, and prepare for interviews. The student will explore local employment resources and career opportunities. COREQUISITES: Complete course 101-121 - Intermediate Accounting Take 101-131 - Management Accounting

101-106
Accounting Spreadsheet Applications
Credits: 3.00
In this course, learners develop and edit business-related worksheets and charts. They link worksheets and workbooks to each other to create linking of data between them.

Learners examine advanced topics such as data tables, GoalSeek, Scenarios, and Solver, and they perform 'what if' calculations on data. Upon completion of the course, learners will be able to apply financial functions and macros to worksheet data and to create reports. They will also be prepared to earn the Microsoft Office Specialist: Microsoft Excel Expert certification

101-107
Accounting Capstone
Credits: 3.00
The accounting capstone course will guide the student in dealing with ethics, internal control and financial statement analysis in the accounting environment. Students will resolve accounting problems by applying skills and techniques acquired in previous courses. Students will apply business law and ethics to the accounting environment. PREREQUISITES: Take 101-104 - Income Tax Accounting Take 101-119 - Payroll Accounting OR 101-143 Take 101-121 - Intermediate Accounting Take 101-131 - Management Accounting Take 101-154 OR 101-128 - QuickBooks Online COREQUISITES: Course 101-155 - Financial Analysis/Management

101-112
Accounting for Business
Credits: 3.00
A practical approach to the study of accounting. Basic accounting practices and procedures are explained with particular emphasis on the transactional effect on the income statement and balance sheet. Other areas covered include adjusting and closing entries; accounting for cash, including bank reconciliations and payroll accounting.

101-114
Accounting Principles
Credits: 4.00
Accounting Principles is an introduction to the field of accounting. Fundamental concepts of the accounting process including financial statement preparation, journal entries, posting, adjusting and closing entries. Cash, inventory, receivables, payables, and plant assets including depreciation methods are also covered.

101-116
Corporate Accounting
Credits: 3.00
In this course, learners will focus on accounting for corporations. Students will complete the accounting cycle for a corporation including financial statement preparation. Other topics covered will include accounting for stockholders' equity, correcting entries and error analysis. Students will also investigate appropriate internal controls and identify ethical considerations for processing financial transactions. PREREQUISITES: Complete course 101-114 - Accounting Principles COREQUISITES: Take 103-143 - Computers for Professionals OR 103-102 - Microsoft Excel course 103-143 - Computers for Professionals or 103-102 - Microsoft Excel Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Take 801-136 - English Composition 1

101-119
Payroll Accounting
Credits: 3.00
In this course, learners focus on preparing the payroll for a business. Students examine current payroll tax laws and regulations to calculate gross and net pay of employees, determine the employer's liability for payroll taxes, and prepare related journal entries. Students complete a Wisconsin Sales and Use Tax form. Upon completion of the course, students will be able to use computerized accounting software to enter and prepare a company's payroll and related reports.

101-121
Intermediate Accounting
Credits: 4.00
In this course, learners apply generally accepted accounting principles (GAAP) to corporations through in-depth analysis of cash, receivables, and inventory. They examine operational asset acquisition, depreciation, and disposal and investigate and apply present value concepts. Upon completion of the course, learners will be able to prepare, analyze, and interpret financial statements using Excel spreadsheet software. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Complete course 801-136 - English Composition 1 Complete course 101-116 - Corporate Accounting;

101-128
QuickBooks Online
Credits: 3.00
In this course, learners investigate Intuit's cloud-based software. They set up a business and record customer, vendor, inventory, banking, credit card, general ledger, and payroll transactions. Learners generate financial statements and other financial accounting related reports. Upon completion of the course, learners are able to pursue the Intuit QuickBooks Certified User exam. COREQUISITES: Take 101-114 - Accounting Principles OR 101-112 - Accounting for Business

101-129
Integrated Accounting and Analytics
Credits: 3.00
In this course, learners build critical skills in accounting related software programs. The learner examines information, utilizes technology to analyze it from a financial perspective, and will implement downloads and uploads of large data sets for efficient data analysis. Upon completion of the course,learners will be ready to implement these skills in a workplace environment. PREREQUISITES: Take 101-106 - Accounting Spreadsheet Applications Take 101-116 - Corporate Accounting

101-131
Management Accounting
Credits: 4.00
In this course, learners will focus on the fundamentals of management accounting for a manufacturing company. Students will learn the flow of costs through the accounting system including material, labor and factory overhead. The student will also prepare job order and process costing, cost accumulation, as well as computing and recording variances in a standard cost system. Cost behavior analysis and total quality management will also be covered. Upon completion of the course, students will be able to use quantitative models and cost analysis to make managerial decisions as well as prepare a master budget. PREREQUISITES: Complete course 101-114 - Accounting Principles

101-155
Financial Analysis/Management
Credits: 3.00
The student will think critically and apply accounting knowledge, principles, and procedures by utilizing financial analysis and financial management techniques in managing the financial aspects of a 'for profit' business. The student will learn to measure risk/reward/return; analyze corporate financial statements, and use time value of money analysis to make long-term financing decisions. The student will analyze corporate solvency and profitability utilizing ratio and trend analysis, apply financial valuation and working capital management techniques, develop cash budgets, and develop pro forma financial statements. A corporate annual report project is required using spreadsheet and word processing software. PREREQUISITES: Complete course 101-106 - Accounting Spreadsheet Applications COREQUISITES: Course 101-121 - Intermediate Accounting

102-121
Credit Management
Credits: 3.00
The learner will examine the world of personal and business credit and explore the implementation and consequences of various credit management policies. The learner will also examine applicable regulations as it pertains to consumer and business credit, as well as relationships with regulatory agencies, stakeholders and the management of the business as it relates to fiduciary responsibilities of the modern manager. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Take 801-136 - English Composition 1

102-122
Investments
Credits: 3.00
This course considers investments from the perspective of the individual or family. A broad range of topics are discussed pertaining to financial markets and the risk and timing of investments. Analysis factors such as the investment environment, the industry and individual companies are discussed in terms of stock and fixed income investments including bonds and treasury notes. Investment strategies are utilized to develop a diversified portfolio utilizing mutual funds and money market funds.

102-137
Business/Introduction to
Credits: 3.00
General orientation to the business world. Studies include organization and administration, production, labor and personnel, accounting and statistics, distribution, finance, and the relationship of business to society.

102-160
Business Law
Credits: 3.00
Business Law is a survey course which introduces the student to relevant legal issues that affect business today. Students will learn the fundamentals of law from the U.S. Constitution to the Uniform Commercial Code, from Contract Law to Property Law, and will be able to identify the legal basis of various business activities.

102-186
Business Management Internship
Credits: 3.00
Establishes an opportunity for the student to apply training and skills in a business work environment. The student will spend 144 hours at the worksite(s). the worksite activities will allow the student to interact with a variety of management functions found in small to medium sized businesses. Classroom hours will include preparation of job portfolio materials and interview techniques.

102-196
Business Decision Management
Credits: 4.00
This capstone course within the Business Management Program will take the student through the decision process of a business enterprise. This class will pull together the breadth of the learner's business and general educational exposure, experience and education leading into this course and put practical use and application to this knowledge. Application concepts such as capital budgeting techniques, time value of money consideration, conventional and alternative sources of capital, mitigating risk and liability through utilizing various forms of business organizations as well as analysis of financial statements will be covered in detail. The learner will then assemble their own business plan for a new venture, business line expansion, business acquisition or

business divestiture. PREREQUISITES: Complete course 104-101 - Marketing Principles and course 101-114 - Accounting Principles

103-102
Microsoft Excel
Credits: 1.00
Introduction to Excel spreadsheet software. Students will learn how to create, store, retrieve and edit a variety of spreadsheets and charts, format worksheets and use formulas. Basic functions will be stressed.

103-103
Microsoft Excel II
Credits: 1.00
This course will take students to the next level of competency in Excel. Topics covered include creating workbooks using templates, multiple sheets, 3-D references in formulas and linked workbooks, using database features of Excel, use copy, paste, paste special, and paste link features, and create charts using the Chart Wizard.

103-105
Microsoft Access
Credits: 1.00
For beginning-level users of Microsoft Access. Students will discuss basic database terminology and design concepts; create and modify table structures; add, change, and delete records; and create simple selection queries to find, display, and print records.

103-109
Windows Operating Systems and Concepts
Credits: 1.00
This is the beginning course for students wishing to learn the Windows Operating System. Creating, organizing, and manipulating files and folders in this operating environment will be emphasized. Setting and managing security and privacy settings, and customizing windows, will also be addressed.

103-110
Microsoft PowerPoint
Credits: 1.00
This course will take the user of PowerPoint through the basic procedures necessary to create a presentation and related handout materials. The student will learn to use the wizards, toolbars, dialog boxes, menus, and various PowerPoint views to create a presentation.

103-111
Microsoft PowerPoint II
Credits: 1.00
This course will take the user of PowerPoint presentation graphics to an advanced level of competency. Inserting graphics, clip art, and organizational charts are emphasized. Adding sound to the presentation is also covered.

103-112
Microsoft Word
Credits: 1.00
This course is designed to teach the participant the fundamentals of word processing with Microsoft Word. A variety of business documents will be created to familiarize the learner with various commands and features.

103-113
Microsoft Word II
Credits: 1.00
This course will cover multi-page documents, tables, columns, graphics and other desktop publishing features.

103-142
Basic Computing
Credits: 1.00

This course will give the learner the skills to use electronic mail, Bb, Web Advisor, common beginning features of Microsoft Office, USB usage, printing at Gateway, and saving/opening files.

103-143
Computers for Professionals
Credits: 3.00
This course introduces students to the use of a PC through hands-on practice. Students explore the fundamentals of using digital technologies to connect, learn, and engage. Students will use the version of Microsoft Office software (MS Word, MS Excel, MS PowerPoint) in use at Gateway Technical College. Upon successful completion of the course, the student will be able to use MS Office applications.

104-101
Marketing Principles
Credits: 3.00
This is a foundational course that introduces students to the principles of marketing. The course explores the entire marketing mix including: segmentation, targeting, positioning, marketing research, consumer behavior, Product development, pricing policies, distribution and overview of promotion. This course provides a comprehensive overview of the exciting world of marketing.

104-104
Selling Principles
Credits: 3.00
Principles of Selling provide the student with a basic understanding of the consultative selling process. This course will build a solid understanding of the steps in the professional sales process, examining the characteristics of a successful salesperson, buyer behavior, communication styles, and ethics. Class discussions of actual selling problems will be encouraged in addition to solving case problems, scenario role plays, and student's sales presentations.

104-105
Promotion Principles I
Credits: 3.00
Students are introduced to the theory and practice of integrated marketing communications. This course is designed to provide an understanding of the promotional elements; advertising, direct marketing, public relations, sales promotion, and digital marketing with emphasis placed on implementation of integrated marketing communications (IMC) in planning marketing and promotional programs.

104-109
Marketing/Sports and Event Introduction
Credits: 3.00
This course will provide students with an awareness of the careers available within sports/event marketing industry and enable them to learn the introductory skills necessary to pursue employment in the field. A basic understanding of sports and event marketing followed with exposure to the major components of the industry will be covered. Students will also maintain an awareness of current trends and happenings in the industry.

104-115
Marketing Capstone/Internship
Credits: 3.00
This course will allow you to prepare for entering the career of marketing. You will create and update career credentials (resume and portfolio) that will be necessary to compete in an employment market. To further enhance your employability you will be able to demonstrate your marketing skills in an applied internship.

104-126
Business Marketing I
Credits: 3.00
Process and systems analysis, inventory planning and control, quality control, marketing cost analysis, marketing plans all related to industrial goods.
PREREQUISITES: Course 104-101 - Marketing Principles

104-133
Social Media Strategies
Credits: 3.00
In this course, learners explore social media marketing and determine how these media are revolutionizing the marketing landscape today. Learners integrate social media to increase brand awareness, identify key audiences, and generate leads. Upon successful completion of the course, learners will be able to use social media strategies to build meaningful relationships with customers.

104-137
Digital Marketing
Credits: 3.00
In this course, learners investigate marketing through digital channels. Using electronic devices, learners investigate mobile applications, email, and web applications. They examine how web design, Search Engine Optimization (SEO), and reputation management are applied to digital promotion. Upon completion of the course, learners will be able to initiate, manage, and evaluate digital marketing strategies for a business.

104-172
Marketing Management
Credits: 3.00
This course is an expanded look at issues and trends in the field of marketing. This course provides the student with decision-making activities that are involved with marketing management. Emphasis is placed on marketing opportunities and strategies used in the marketing mix. Students will develop a comprehensive marketing plan. PREREQUISITES: Complete course 801-136 - English Composition 1 Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

104-173
Marketing Research
Credits: 3.00
Businesses today need current, accurate information upon which to base their decisions. We will study the types and sources of data as well as the methods of

organizing that data into usable readable information for marketing decisions. We will apply our learning by developing a marketing research project.

104-194
International Marketing
Credits: 3.00
The course is a study in the marketing of goods and services at the Global level. The international uncontrollable variables of marketing are analyzed along with emphasis on market development, marketing research, product planning, international distribution, promotion, and pricing. Students explore how marketing strategies and tactics must be managed and adapted for success in different cultural, economic, geographic and political environments around the world.

105-106
Business Communications
Credits: 3.00
In this course, students apply the skills and tools necessary to effectively compose business communication in a written format. Each student demonstrates the application of analyzing the communication situation, including: planning and preparing the message; developing persuasive, informational, and negative messages, sales letters, media releases, proposals and promotional materials; demonstrating skills in basic writing mechanics and English grammar; and effective electronic communication. PREREQUISITES: Course 801-136 - English Composition 1

106-006
Business Communication Skills
Credits: 3.00
Effective written business communication principles are discussed and applied to the composition of routine business correspondence and reports. Oral communication presentations will be used to enhance the student's understanding of effective communication principles. Proper communication techniques for telephone use will be demonstrated. PREREQUISITES: Take 106-030 - Word Processing for Business with a minimum grade of C or TR; Take 106-137 - Keyboarding Applications; Minimum Grade C,TR; Complete course 801-136 - English Composition 1

106-016
Principles of Customer Service
Credits: 3.00
Provides a solid foundation in the areas of customer service and service excellence and provides techniques to retain customers and maintain loyalty in both a face-to-face environment and in remote settings via telephone and the Internet.

106-017
Customer Service Capstone
Credits: 1.00
Students will job shadow at a customer service call center.

106-018
Customer Service Management
Credits: 3.00
Includes instruction in customer behavior; using customer service databases; Internet searching and retrieval; and telephone, e-mailing, and communications skills.
PREREQUISITES: Course 106-016 - Principles of Customer Service

106-019
Administrative Service Internship 1
Credits: 1.00
Students will be required to complete 36 hours of an on the job work experience. Students will also spend time in the classroom enhancing their employability skills.
PREREQUISITES: Complete Course 106-137 - Keyboarding Applications
COREQUISITES: Take 106-024 - Professionalism in Business Take 801-136 - English Composition 1 Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

106-020
Administrative Service Internship 2
Credits: 1.00

Students will be required to complete 36 hours of an on the job work experience. Students will also spend time in the classroom enhancing their employability skills. PREREQUISITES: Complete course 106-137 - Keyboarding Applications Take 106-024 - Professionalism in Business

106-021
Business Office Fundamentals
Credits: 3.00
This course presents a general orientation to the business world geared toward the office worker. Studies include exploring global and domestic business offices, investigating business functions and learning how departments fit together for one common mission of the organization.

106-021
Business Office Fundamentals
Credits: 3.00
This course presents a general orientation to the business world geared toward the office worker. Studies include exploring global and domestic business offices, investigating business functions and learning how departments fit together for one common mission of the organization.

106-022
Information Management for Business
Credits: 3.00
This course will prepare students to manage records in business in paper and electronic form. Topics covered will include basic database terminology and design concepts, creating and modifying table structures; adding, changing, and deleting records; and creating queries to find, display, and print records. The ARMA rules for records management will also be covered. PREREQUISITES: Complete course 106-137 - Keyboarding Applications with a minimum grade of C or TR;

106-023
Office Management
Credits: 3.00

This course will orient the learner to the function of management in an office. Topics related to managing office operations and procedures, budgeting, interviewing others, assigning and monitoring clerical functions, training and business ethics will be included.

106-024
Professionalism in Business
Credits: 3.00
This course prepares the learner for job search as they near graduation. Topics covered will include; resume and portfolio preparation, interviewing skills, and dressing for success. An emphasis will also be placed on the soft skills necessary in today's business world.

106-025
Spreadsheets in Business
Credits: 3.00
This course prepares the learner to utilize a variety of spreadsheet software in business. While an emphasis will be placed on Microsoft Excel, other current spreadsheet software will be covered. PREREQUISITES: Complete course 106-137 - Keyboarding Applications with a minimum grade C or TR;

106-026
Business Publication
Credits: 3.00
In the course, students will create print-ready newsletters, brochures, flyers, forms business cards, and other business publications using current publishing software including MS Publisher, MS Word, and Adobe. PREREQUISITES: Complete course 106-137 - Keyboarding Applications with a minimum grade C or TR;

106-027
Integrated Business Projects
Credits: 3.00
In this course students complete scenario-based activities using business productivity software skills. Students will apply software and document processing skills to create solutions to common business information needs. Using a case study approach,

students will develop communication, Internet research, teamwork, critical-thinking and problem-solving skills. Upon completion of this course, students will use MS Office Suite to integrate and present data with skill. PREREQUISITES: Complete course 106-025 - Spreadsheets in Business with a minimum grade C or TR; Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

106-028
Office Technologies Essentials
Credits: 3.00
This course is an introduction to the computer system unit, the Internet and social Web, hardware and software, system software, Google applications and emerging office technology.

106-029
Presentations for Business
Credits: 3.00
This course prepares the learner to utilize a variety of presentation software in business. While an emphasis will be placed on MS PowerPOint, other current presentation software will be addressed. PREREQUISITES: Complete course 106-137 - Keyboarding Applications with a minimum grade C or TR;

106-030
Word Processing for Business
Credits: 3.00
This course covers an intermediate level of word processing skills. Proofreading and language skills will be developed through the production of business documents including business letters and reports. Advanced formatting features will be used in MS Word. PREREQUISITES: Complete course 106-137 - Keyboarding Applications with a minimum grade C or TR;

106-126
Keyboarding
Credits: 1.00
Learners will develop touch method typing skills using a computer keyboard.

106-137
Keyboarding Applications
Credits: 3.00
Learners will develop keyboarding skills and basic document formatting skills using word processing software.

106-190
Administrative Office Procedures
Credits: 3.00
This course will develop professional skills and attitudes needed in today's global business environment. Topics include making ethical decisions, working independently and as a team member, and managing time. Telecommunications, mail processing, travel arrangements and conferences, public relations, and ergonomics will be included. PREREQUISITES: Complete course 106-025 - Spreadsheets in Business

107-003
Network+ Exam Prep
Credits: 1.00
This course will prepare an individual for the Network+ certification exam. It is intended for individuals who have completed the CCNA classes (107-135 Data Communications, 107-162 Routing Principles, 107-167 Switching Basics, and 107-168 WAN Technologies) or have a background in network installation, troubleshooting, and maintenance.

107-011
IT in Business
Credits: 3.00
This course is a basic introduction to Information Technology (IT) and how it impacts our lives. It will focus on how IT professionals implement industry tools and applications throughout businesses. Students will learn proper terminology as well as industry trends and concepts.

107-013
IT Job Search Skills
Credits: 1.00
Learn how to start your IT job search! Students will develop a job search plan and prepare a professional job search portfolio. Different job search tools will be utilized in order to assist the student in finding the best job for them. Current job searching trends and interviewing techniques will be discussed and applied. PREREQUISITES: Take 801-136 - English Composition 1; Minimum Grade C

107-014
A+ 801 Certification Review
Credits: 1.00
This course will prepare an individual for the A+ 801 Exam. This is the first of two exams that must be passed for an individual to achieve the A+ certification. This class is intended for individuals who have completed coursework in basic computer support or have a background in PC troubleshooting. The focus of this class is installation and support of personal computer hardware, laptops, printers, networks, security, safety and environmental issues, and communication and professionalism. This class will consist of lectures on the essential material for this exam and will not provide class time to perform labs. All students will be required to purchase a book and certification test bank.

107-015
A+ 802 Certification Review
Credits: 1.00
This course will prepare an individual for the A+ 802 Certification Exam. This is the second of two exams for an individual to achieve A+ Certification. This class is intended for individuals who have passed the A+ 801 Exam and have completed coursework in computer support or have a background in PC troubleshooting. The focus of this class is installation and support of operating systems, mobile devices, security/forensics, and properly and safely diagnose, resolve and document common hardware and software issues whil applying troublshooting skills. This class will consist of lectures on the essential material for this exam and will not provide class time to perform labs. All students will be required to purchase a book and certification test bank.

107-016
A+ Certification Review Part 1
Credits: 1.00
This course will review the material covered in the first of two certification exams that must be passed in order for an individual to achieve their CompTIA A+ certification. The course will follow the current exam series (for exam specifics please visit the CompTIA.org website). This class is intended for individuals who have completed coursework in basic computer support (such as the IT Essentials course) or have a background in PC troubleshooting. The focus of this course is to review the installation and support of personal computer hardware and peripherals, mobile device hardware, and networking devices. It also covers troubleshooting hardware and network connectivity issues. This class will consist of lectures on the essential material covered in this exam and is meant as a review so it does not include hands-on labs. All students will be required to purchase a book and certification study test bank tool.

107-017
A+ Certification Review Part 2
Credits: 1.00
This course will review the material covered in the second of two certification exams that must be passed in order for an individual to achieve their CompTIA A+ certification. The course will follow the current exam series (for exam specifics please visit the CompTIA.org website). This class is intended for individuals who have completed coursework in basic computer support (such as the IT Essentials course) or have a background in PC troubleshooting. The focus of this course is to review the installation and configuration of desktop and mobile device operating systems. It also covers cloud computing fundamentals, computer and network security and operational procedures. This class will consist of lectures on the essential material covered in this exam and is meant as a review so it does not include hands-on labs. All students will be required to purchase a book and certification study test bank tool.

107-177
IT Project Management
Credits: 4.00
Focus will be on project management from the information systems professional perspective while keeping a customer-based orientation and business focus. Cooperative team-based business strategies will be stressed. Students will develop

written and oral communications, as necessary, to complete the steps within the project management process. Project management software will be utilized, within all phases of the systems development as the students progress through a team-based project simulation. PREREQUISITES: Courses 154-113 - IT Apps Server & Support minimum grade C or TR; Take 801-197 - Technical Reporting

107-193
IT Essentials
Credits: 3.00
IT Essentials focuses on the relationship between hardware and system software. The course topics include PCs, peripherals, networking, security, troubleshooting, and communication skills. IT Essentials is an introductory course that presents a foundation toward the pursuit of CompTIA A+ certification.

109-101
Hospitality/Principles of
Credits: 3.00
This introductory course tours the related hospitality fields of hotels, tourism, foodservice, and attractions with an emphasis on customer service. The course will cover the typical types of establishments found in the US and Wisconsin. Students will be introduced to common job titles, organizational structures, career opportunities, and trends in this field.

109-106
Advanced Tourism Management
Credits: 3.00
This course covers practical marketing and management for temporary events such as fairs, pop-ups, and tourism events. The goal is to create vital internet marketing strategies using emerging technologies to entice customers. Students will identify the key customer service needs for this type of tourism event. PREREQUISITES: Complete Course 109-112 - Tourism, Introduction Tol Take 109-171 - Hospitality Sales and Marketing

109-108
Event Management
Credits: 3.00
This course explores the details of event management including identifying stakeholders, planning event, development of event needs, management of participants, and execution of events.

109-110
Rooms Division Management
Credits: 3.00
This class will highlight the operations of the Rooms Division of a hotel including Reservations, Front Desk, Night Audit, Bell Staff, Housekeeping, and Laundry. The goal is to understand the relationship between the departments and how they support the Guest Cycle.

109-112
Tourism, Introduction Tol
Credits: 3.00
This course covers the tourism industry including why people travel, the social and cultural aspects to tourism, and governmental development of tourism. Students will explore the interrelations between tourism, hotels, food, and attractions in the Wisconsin region. Emphasis will be on customer service needs within this field. PREREQUISITES: Take 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

109-113
Tourism Attraction and Management
Credits: 3.00
This course is an overview of the Tourism Attractions in the local area. Students will identify the establishments, look at the specific unique customer service and management aspects of this type of establishment.

109-114
Managing Services/Hospitality Industry
Credits: 3.00
Students will master the key supervision skills needed in the hospitality field. Topics will include planning, organizing, staffing, controlling, leadership, team management, staffing, and training.

109-121
Hotel Operations, Intro to
Credits: 3.00
This course covers the historical development of hotels with a discussion of the modern day types of properties. Students will learn the guest cycle with a focus on customer service and will explore the interrelations of the different departments in a hotel or resort. PREREQUISITES: Take 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

109-122
Service in the Hospitality Ind, Intro to
Credits: 3.00
Discusses customer service in the hospitality field, how it is the backbone of this industry. Students will learn how to identify good and not so good service as well as how correct service evolved and the reasons for its existence. Students will learn how to deal with upset customers and gain basic dispute management skills.

109-124
Hotel Facilities Management
Credits: 3.00
This course focuses on the management of the property including design and renovation considerations. The class will also identify security and risk management issues especially as related to customer service standards. This class will also discuss the facility operations of alternative hotels including historic, B&B, spas, resorts, etc. PREREQUISITES: Course 109-121 - Hotel Operations, Intro to

109-125
Hospitality Managerial Accounting
Credits: 3.00
This course explains financial statements as they apply to the hospitality industry. Students will learn how to interpret, analyze, and use these statements. Ratios and comparison techniques will be explored. Students will create budgets using generally accepted principles.

109-126
Advanced Customer Service Mgmt
Credits: 3.00
This class focuses on the systematic structures needed to provide exceptional customer service including hiring, training, work organization, quality management and quality assurances. Students will explore how change affects customer perceptions and expectations. PREREQUISITES: Complete course 109-122 - Service in the Hospitality Ind, Intro to with a minimum grade of C,TR;

109-127
Hotel Strategic Management
Credits: 3.00
This capstone course focuses on the strategic management of a hotel property. Student will master cost controls, yield management, and revenue strategies as it relates to lodging properties. Students will be able to articulate how their decisions affect the marketing, financial, and customer service standards of a hotel.

109-128
Hospitality Front Line Internship
Credits: 2.00
This hands-on course focuses on work experience at the entry level in the Hospitality Industry. PREREQUISITES: Take 109-101 - Hospitality/Principles of

109-129
Hospitality Supervisory Internship
Credits: 2.00

This hands-on course focuses on work experience at the supervisory level in the Hospitality Industry. PREREQUISITES: Complete course 109-101 - Hospitality/Principles of COREQUISITES: Complete course 109-128 - Hospitality Front Line Internship

109-131
Hospitality Capstone
Credits: 2.00
This course readies the student for employment in the hospitality field. PREREQUISITES: Complete course 109-122 - Service in the Hospitality Ind, Intro to Take 109-128 - Hospitality Front Line Internship COREQUISITES: Complete course 109-129 - Hospitality Supervisory Internship

109-132
Food Operations in Hospitality
Credits: 3.00
In this course, students explore the fundamentals of managing food operations in a lodging or tourism setting. They examine front-of-the-house foodservice operations and beverage service which includes wine, spirits, beer, mixology, and non-alcoholic beverages. Students analyze the sequence of service, job descriptions, and menu applications. They identify bar and kitchen equipment and how to create menus to match customer needs and available resources. Upon completion of the course, students will be able to oversee the food operations in a hotel or tourism attraction.

109-171
Hospitality Sales and Marketing
Credits: 3.00
Study marketing as it applies to hospitality industries. Develop theoretical and practical experience to create marketing plans for a variety of customers and establishments. Topics include the fundamentals of marketing principles, development of the marketing plan, sales promotion, marketing tactics and promotions, and special problems relating to this industry.

110-101
Intro to the Paralegal Profession
Credits: 3.00
In this course, students analyze the legal profession. They examine the American legal system and related ethics and terminology. Students investigate legal research and selected areas of substantive law. Upon completion of the class, students will have a documented plan for their future enrollment in the paralegal program and an expectation of their required participation in the program of study.

110-102
Civil Procedure
Credits: 3.00
In this course, students explore the initial stages of civil litigation. They examine initial client contact, investigation, pleadings, and motions. Upon completion of the course, students will be able to provide clients with guidance in the area of civil litigation.

110-103
Family Law
Credits: 3.00
In this course, students examine basic legal concepts related to family domestic relations law. They analyze contracts affecting marriage such as annulment, divorce, legal separation, and legal actions affecting the family including paternity, adoption, and reproduction. Upon completion of the course, students will be able to draft pleadings and documents relevant to family law practice.

110-104
Law Office Management and Technology
Credits: 3.00
In this course, students examine the legal aspects of the formation, operation, and dissolution of basic types of business organizations. They explore the use of technology to access, retrieve and manage electronically stored information as well as its ability to enhance collaboration. Upon completion of the course, students will be able to explain the substance and procedure involving business organizations and how the use of technology increases the efficiency of the legal process.

110-105
Legal Research
Credits: 3.00
In this course, students engage in legal research using traditional and electronic methods. They locate and cite relevant case law, statutory law, and administrative law as well as secondary sources. Upon completion of the course, students will be able to apply legal research and citation skills effectively.

110-106
Civil Litigation Procedures
Credits: 3.00
In this course, students build on basic civil litigation knowledge to analyze civil litigation procedures. They explore discovery procedures, trial processes, and appellate proceedings. Upon completion of the course, students will be able to assist with civil litigation case planning, development, and management. PREREQUISITES: Take 110-102 - Civil Procedure

110-107
Criminal Law and Procedure
Credits: 3.00
In this course, students analyze the theory and practical application of criminal law and procedure. They examine the basic classification of crimes and the processes by which Constitutional rights of defendants are upheld. Upon completion of the course, students will be able to assist attorneys practicing in the field of criminal law either as prosecutors or defense attorneys.

110-108
Legal Writing
Credits: 3.00
In this course, students analyze the fundamentals of effective legal writing. They draft a variety of documents including legal memoranda, memoranda, case briefs, pleadings, motions, and legal correspondence. Upon completion of the class, students will be able to apply practical skills required for legal writing and analysis. PREREQUISITES: Take 110-105 - Legal Research Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning Take 801-136 - English Composition 1

110-109
Estate Planning and Probate
Credits: 3.00
In this course, students examine the estate planning process. They analyze the path of the probate process with a focus on Wisconsin laws. Students explore wills, trusts, estates, power of attorneys, and advanced directives. They investigate probate forms and procedures used in probate administration, and they examine law regulating the inheritance of property through intestacy. Upon completion of the course, students will be able to explain the probate process with a focus on Wisconsin laws.

110-110
Administrative Law and Public Benefits
Credits: 3.00
In this course, students explore the process by which government agencies make and administer rules and regulations. They analyze how agencies adjudicate cases and controversies involving those rules. Students examine available healthcare and public benefits. Upon completion, students will be able to analyze administrative code provisions, benefit manuals, and federal and state statutes and prepare an argument and exhibits for administrative law hearing.

110-111
Guardianships and Protective Services
Credits: 3.00
In this course, students examine the process of filing a guardianship action and the related protective services system. They analyze the process of evaluating client capacity and the statutory requirements and procedures for filing an action. Students examine legal ethics and alternatives to guardianship. Upon completion of the course, students will be able to draft pleadings, court orders, and letters to clients related to guardianship and protective services.

110-112
Immigration/International Law
Credits: 3.00

In this course, students analyze international law and the immigration court system. They examine international courts and treaties and characterize individual human rights recognized internationally. Upon completion of the course, students will be able to explain the process for acquiring US citizenship and the process for obtaining work and student visas.

110-113
Employment Law
Credits: 3.00
In this course, students analyze federal and state laws governing employment relationships. They examine job discrimination, sexual harassment, work place privacy, labor relations, and human resource management. Upon completion of the course, students will be able to apply the appropriate federal and state laws to employment situations.

110-114
Bankruptcy Law
Credits: 3.00
In this course, students explore pre- and post-judgment collection rights. They examine creditor protections as well as state and federal consumer protection laws and federal bankruptcy laws. Upon completion of the course, students will be able to assist lawyers and their clients through the bankruptcy process.

110-115
Ethics in the Legal Profession
Credits: 3.00
In this course, students explore legal ethics and the obligations of paralegals. They examine the regulation of attorney and paralegal conduct, confidentiality, unauthorized practice of law, conflicts of interest, client management, disciplinary procedures, and malpractice. Students analyze strategies for identifying and resolving ethical problems.

Upon completion of the course, students will be able to explain professional responsibility and apply ethical rules in making decisions.

110-116
Trial Prep/E-Discovery & Legal Tools
Credits: 3.00
In this course, students examine the process of electronic discovery (e-discovery) as a digital investigation procedure to facilitate search for key information. They explore the process of recovering, searching, organizing, and analyzing data stored on computers and other digital storage devices. Upon completion of the course, students will be able to apply electronic discovery tools to support case management and trial preparation.

110-117
Paralegal Career Readiness
Credits: 2.00
In this course, students enhance their readiness for a paralegal career by preparing for a law-related position. They identify the needs of potential employers and practice interviewing skills. Students engage in simulated scenarios to enhance their practical paralegal skills, and they develop a portfolio suitable for use in their employment search. Upon completion of the course, students will be ready to successfully engage in the employment search process. COREQUISITES: Take 110-108 - Legal Writing

110-118
Paralegal Internship
Credits: 2.00
In this course, students prepare for a paralegal career by obtaining a law-related position. In their work under the supervision of a qualified professional, students cultivate practical professional skills required to support law firms, government agencies, private businesses, and nonprofit organizations with their legal needs. Upon completion of the course, students will be able to explain and demonstrate the competencies that help individuals succeed in supporting legal roles. COREQUISITES: Take 110-108 - Legal Writing

114-101
Personal Financial Planning
Credits: 3.00
This course considers finance from the perspective of the individual or family unit. A broad range of topics in personal finance are discussed including: planning and managing your personal finances, making purchasing and credit decisions, insuring assets, investing and controlling your financial future.

116-101
Compensation and Benefits
Credits: 3.00
In this course, students analyze compensation and benefits programs as they fit into a workforce staffing plan. They examine program design, implementation, management, and measurement. Students relate the alignment of compensation and benefits programs to organizations' values through analysis of a total rewards package. Upon completion of the course, students will be able to explain how compensation and benefits programs influence employee recruitment, retention, motivation, and performance. PREREQUISITES: Take 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning Take 196-193 - Human Resource Management; Minimum Grade of C; Take 196-134 - Legal Issues for Supervisors; Minimum Grade of C;

116-102
Training and Development
Credits: 3.00
In this course, students examine how to foster a learning culture. They explore how to identify training needs, match them to resources and providers, and measure results. Students analyze effective strategies for a variety of training techniques and environments. They align employee development initiatives to the achievement of organizational objectives. Students develop and present training projects based on adult learning theory and instructional design techniques. Upon completion of the course, students will be able to explain how to develop a culture of continuous learning that encourages employees to flourish and the organization to thrive. PREREQUISITES: Take 196-193 - Human Resource Management; Minimum Grade of C; Take 196-134 - Legal Issues for Supervisors; Minimum Grade of C;

116-103
Employee Relations and Engagement
Credits: 3.00
In this course, students explore employee relations and engagement concepts. They identify regulations and policies that govern and practices that guide workplace rules and conduct. Students examine tools of employee engagement and processes to measure and evaluate levels of engagement. They relate employee attitudes and engagement to the quality of the organizational culture. Upon completion of the course, students will be able to explain the engagement practices that successfully connect an organization and its employees. PREREQUISITES: Take 196-193 - Human Resource Management; Minimum Grade of C; Take 196-134 - Legal Issues for Supervisors; Minimum Grade of C;

116-104
Recruitment and Selection
Credits: 3.00
In this course, students analyze the recruitment and selection process. They identify the recruitment model and examine the process to measure and evaluate recruitment results. Students relate successful employee recruitment to the success of an organization and explain how recruitment and selection objectives should be aligned with the organization's strategic objectives. They evaluate applications and resumes and analyze interview techniques appropriate for the work required. Upon completion of the course, students will be able to explain effective recruitment and selection strategies as well as administer employee retention programs. PREREQUISITES: Take 196-193 - Human Resource Management; Minimum Grade of C; Take 196-134 - Legal Issues for Supervisors; Minimum Grade of C;

116-105
Human Resources Capstone
Credits: 3.00
In this course, students analyze a case study to examine the complex and varied topics associated with human resource management. They synthesize knowledge and skill acquired through their participation in the program and demonstrate their cumulative knowledge. Through this integrative experience, students will be prepared to apply human resource management skills in the workplace.

116-105
Human Resources Capstone
Credits: 3.00
In this course, students analyze a case study to examine the complex and varied topics associated with human resource management. They synthesize knowledge and skill acquired through their participation in the program and demonstrate their cumulative knowledge. Through this integrative experience, students will be prepared to apply human resource management skills in the workplace.

116-106
Human Resources Internship
Credits: 3.00
In this course, students apply knowledge and skill acquired through their participation in the program to a practical occupational experience. They engage in work related to key areas of human resource management. Students provide weekly reporting of their demonstration of tasks aligned with human resource management objectives. Upon completion of the internship, students will have authentic work experience they can apply to chosen human resource management-related roles.

116-106
Human Resources Internship
Credits: 3.00
In this course, students apply knowledge and skill acquired through their participation in the program to a practical occupational experience. They engage in work related to key areas of human resource management. Students provide weekly reporting of their demonstration of tasks aligned with human resource management objectives. Upon completion of the internship, students will have authentic work experience they can apply to chosen human resource management-related roles.

138-118
International Bizsquad
Credits: 3.00
In this course International Bizsquad students prepare to engage in multidisciplinary global projects. They examine best practices to communicate for positive outcomes. Students apply effective project management skills and manage scope to support successful project implementation. Upon successful completion of the course,

students will have acquired hands-on, international experience in project management and implementation.

140-105
International Field Study
Credits: 3.00
Provides students with first-hand knowledge of working and studying in their program related area in the international environment. While abroad, students will gain cultural knowledge and understanding of values and behaviors in a different society and workplace. Upon completion of the course, students will be able to incorporate a global perspective into a comparison of professional and social practices in the US and the country visited. They will share their experiences and findings in a formal presentation.

140-106
Serving to Learn Globally
Credits: 2.00
Through immersion in a global community, students will collaborate to identify a need, plan a service, perform the service and/or evaluate the result. They will apply principles of professionalism, team work, and critical thinking, as well as their chosen career's technical knowledge, attitude and skill. Through reflection and dissemination, students will integrate an increased sensitivity to the diversity of the community, global connectivity, civic engagement and their own professional career path.

140-107
Cultural Elements of Study Abroad
Credits: 1.00
In this course, students engage in global learning opportunities by working and studying abroad. Students develop cross-cultural skills through their observation of, communication with, and participation in the local culture visited. Upon completion of the course, students relate their global perspective to their program of study, and they present their experience abroad.

140-109
International Field Study
Credits: 3.00
Provides students with first-hand knowledge of working and studying in their program related area in the international environment. While abroad, students will gain cultural knowledge and understanding of values and behaviors in a different society and workplace. Upon completion of the course, students will be able to incorporate a global perspective into a comparison of professional and social practices in the US and the country visited. They will share their experiences and findings in a formal presentation.

141-102
French for International Travel
Credits: 1.00
Students will learn the fundamentals of the French language spoken in the country they are visiting and become familiar with modes of transportation, currency, and food in preparation for their study abroad experience.

141-103
German for International Travel
Credits: 1.00
Students will learn the fundamentals of the German language spoken in the country they are visiting and become familiar with modes of transportation, currency, and food in preparation for their study abroad experience.

141-106
Culture and Language of Italy
Credits: 3.00
This course is designed as an introduction to the Italian language in which a formal presentation of the proper language and correct grammatical structures will be presented through listening, reading, writing, and speaking in Italian. The course includes cultural studies of Italy including business, art, government, education,

geography, music and travel. In addition, learners will examine cultural behaviors essential to engage successfully in Italian business and social settings.

141-107
Cultural Elements of Study Abroad
Credits: 1.00
Students will become familiar with geography, climate, demographics, conventions, customs, beliefs and safe travel practices of the country they are visiting in preparation for their study abroad experience. While abroad, students will gain cultural knowledge and understanding of values and behaviors in a different society and workplace.

141-109
International Field Study
Credits: 3.00
Provides students with first-hand knowledge of working and studying in their program related area in the international environment. While abroad, students will gain cultural knowledge and understanding of values and behaviors in a different society and workplace. Upon completion of the course, students will be able to incorporate a global perspective into a comparison of professional and social practices in the US and the country visited. They will share their experiences and findings in a formal presentation.

141-110
Culture and Language of Peru
Credits: 3.00
This course is designed as an introduction to the culture of Peru and the Spanish language in which the proper language and correct grammatical structures will be presented through listening, reading, writing, and speaking in Spanish. The course includes cultural studies of Peru including history, government, economy, education, geography, art, music and demographics. In addition, learning will examine cultural behaviors essential to engage successfully in community service work in Peru and communicate in social settings.

141-111
Culture and Language of Iceland
Credits: 3.00
This course is designed as an introduction to the culture of Iceland, the Icelandic language and Icelandic and Norse literature. Icelandic literature will be presented through a series of readings and instruction provided by the University of Iceland. The course includes cultural studies of Iceland including history, government, economy, education, geography, geology, sustainable energy, art, music and demographics.

145-106
Entrepreneurship 3 - Operations MGMT
Credits: 3.00
This course covers the aspect of effectively managing the resources of a small business. Covering the topics of managing finances, staff, marketing and technology. The student will work on projects that will be focused on their specific business needs and will assist the student in planning how to handle their day to day operations.

145-119
Entrepreneurship
Credits: 3.00
Can your idea be turned into a profitable business? Will power and hard work are not enough to guarantee success. You must first determine the feasibility of your idea. Before you quit your job, invest your life savings or dedicate time to complete a business plan, wouldn't it be nice to know whether business ownership is right for you? In this class, you'll examine your business idea from every angle. Not only will it help you make a decision about starting your business, you will discover whether the life of an entrepreneur is right for you.

145-120
Business Planning and Development
Credits: 3.00
Regardless if you need financing or not, a business plan is essential for the entrepreneur to be successful. This course will take a comprehensive look at your prospective business. Looking at key components that will include evaluating and developing your product/service offering, marketing plan, financial plan and growth

plan. At the end of class you will develop a business plan for your proposed business. PREREQUISITES: Course 145-119 - Entrepreneurship minimum grade C or TR;

145-121
Small Business Ownership
Credits: 3.00
This course goes beyond the business plan and students will have the opportunity to start their own business. Students will combine classroom experience with the management of their business. To make this happen students will be assigned a mentor that will help them through the process. The goal of the course is to assist students in implementing their businesses in an ethical and socially responsible manner that ultimately enhances the local business community. COREQUISITES: Course 145-120 - Business Planning and Development

145-122
Financial Management for Entrepreneurs
Credits: 3.00
In this course, learners explore the role financial reporting has on the decisionmaking process within an organization. Learners explain the structure and content of financial statements, how to analyze financial statements, and explore the role these statements have on an organization. Upon completion of the course, learners will develop financial projections for their proposed business/concept. PREREQUISITES: TAKE 101-154 OR 101-128 - QuickBooks Online; MINIMUM GRADE C, TR; Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning Take 801-136 - English Composition 1

145-123
Intrapreneurial Mindset
Credits: 3.00
In this course, learners evaluate the underlying beliefs and assumptions that drive the behavior enabling entrepreneurs to succeed. Learners apply these techniques in three settings, entrepreneurial, enterprise, and personal. This gives the learner a formula to apply these foundations to enact change in all aspects of their life. Upon the completion of the course, learners will take that knowledge and apply it to the creation, implementation, and evaluation of a self-directed project with a topic of their choosing.

150-106
Intrusion Detection Systems
Credits: 3.00
Learn the basic concepts and techniques of Intrusion Detection Systems (IDS) and other network related defense strategies. Students will set up, configure, and monitor an Intrusion Detection System utilizing different leading edge products. Current network defense strategies will be discussed and popular tools will be used. Students will be able to apply the correct IDS and defense strategies for different business goals.

150-114
Network Concepts - CCNA1
Credits: 3.00
This course will provide you with more in depth networking concepts. Topics will include the Internet, OSI model, wireless, security, logical and physical topologies, instant messaging, basic router setup and switch configuration, network connectivity, and hardware and software configurations. You will also learn how to create local area networks and wide area networks. Individuals will learn real-world skills related to employment. COREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

150-115
IoT: Securing Devices
Credits: 3.00
In this course, students continue working with IoT devices. Students connect devices and analyze firmware and software for weaknesses. Students research and perform upgrades to IoT devices. After upgrading the IoT devices, the students secure these devices by applying industry best practices. This may include changing firewall settings or remote access settings. Upon completion of this course, students can recognize, update and secure IoT devices. PREREQUISITES: Course 150-182 - IoT: Connecting Devices Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

150-119
Network Admin Microsoft Server 2019
Credits: 3.00

In this Microsoft Official Academic Course (MOAC) students examine installation, configuration, and storage options in the Windows Server 2019 environment. Students explore processes to maintain, secure, and monitor server performance. Upon completion of the course, students will be prepared to take the Microsoft Certified Solutions Associate (MCSA) Windows Server 2019 exam. COREQUISITES: Take 150-114 - Network Concepts - CCNA1 with minimum grade of C or TR;

150-120
Network Admin Microsoft Server 2 2019
Credits: 3.00
In this Microsoft Official Academic Course (MOAC) students examine networking options in the Windows Server 2019 environment. Students explore DNS, DHCP, IP address management, connectivity solutions, and advanced network infrastructure. Upon completion of the course, students will be prepared to take the Microsoft Certified Solutions Associate (MCSA) Windows Server 2019 exam. PREREQUISITES: Complete course 150-109 or 150-119 - Network Admin Microsoft Server 2019 with minimum grade of C or TR; COREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

150-124
Routing CCNA 2
Credits: 3.00
In this course, students investigate switching, routing, and wireless essentials. They configure, troubleshoot, and secure routers and switches in a small network. They explore wireless local area networks (WLANs), dynamic addressing, switch security, and first-hope redundancy protocols. Upon completion of the course, students will have acquired the knowledge, skills, and practical hands-on experience needed to take the CCNA certification exam. PREREQUISITES: Course 150-114 - Network Concepts - CCNA1

150-131
Network Specialist Internship
Credits: 3.00
Establishes an opportunity for the student to apply training and skills in a business/ industrial/ academic work environment. The student will spend 144 hours at the worksite. Student contracts with the employer and the instructor regarding the work

agreement and competencies. Classroom hours will include preparation of job portfolio materials and practicing interview techniques. PREREQUISITES: Course 150-114 - Network Concepts - CCNA1 Take 107-193 - IT Essentials

150-136
Server Technologies
Credits: 3.00
Learn advanced server technology skills to prepare you to support a production server. These skills include server upgrades, fault tolerance, advanced networking, disaster planning and more. Develop a basic technology plan which includes server management and disaster recovery plans. This class will also prepare you to take the CompTIA's Server+ industry certification exam. PREREQUISITES: Take 107-193 - IT Essentials OR 154-114 - Hardware & Software Support COREQUISITES: Take 150-155 - Data Center Technician

150-145
IT Scripting
Credits: 3.00
This course is designed to provide an overview of modern scripting languages commonly used to build and extend network administration and security tools. The course will introduce the student to scripting on both the Microsoft and Linux platforms. Students will explore the uses of scripting languages and third party modules for accomplishing tasks including scanning, enumeration and automation of network tasks.

150-149
Enterprise Networking & Security CCNA3
Credits: 3.00
In this course, students investigate enterprise networking. They configure, troubleshoot, and secure enterprise network devices in a wide area network(WAN). Students examine WAN technologies and quality of service (QoS)mechanisms used to secure remote access. They explore software-defined networking, virtualization, and automation concepts that support the digitalization of networks. Upon completion of the course, students will have completed the CCNA course series, and they will have

acquired practical, hands-on experience to prepare them for the CCNA certification exam. PREREQUISITES: # Take 150-124 - Routing CCNA 2; Minimum grade C,TR;

150-150
Red Hat Enterprise Linux I
Credits: 3.00
In this course, learners explore key command line concepts and enterprise-level tools. They investigate foundational Linux skills and core tasks such as file management; file systems and storage; and the update, installation, and configuration of software packages. Learners administer users and groups. Upon successful completion of this course and the second course in this series (Red Hat SystemAdministration II), learners will be prepared to take the Red Hat Certified SystemAdministrator (RHCSA®) exam. PREREQUISITES: # Take 150-109 or 150-119 - Network Admin Microsoft Server 2019 or 153 with a minimum grade C or TR; COREQUISITES: Take 801-136 - English Composition 1

150-151
Red Hat Enterprise Linux II
Credits: 3.00
In this course, learners explore key tasks needed to become a Linux administrator. They build on foundational Linux skills as they learn to manage security and system access; execute shell scripts; automate repetitive tasks; manage storage devices, logical volumes, and file systems; and install Red Hat Enterprise Linux using scalable methods. Upon successful completion of this course learners will be prepared to take the Red Hat Certified SystemAdministrator (RHCSA®) exam. PREREQUISITES: Take 150-150 - Red Hat Enterprise Linux I; Minimum grade C,TR;

150-152
IT Tech Skills
Credits: 3.00
In this course, learners are introduced to fundamental IT concepts and terminology, including security, software development, database fundamentals, infrastructure, and applications. Upon completion of this course, students will be prepared to take the CompTia Tech+ Certification.

150-153
Network Admin Microsoft Server 2022
Credits: 3.00
In this course, students investigate the skills required to install, configure, and administer Windows Server 2022. Students explore Active Directory (AD), Group Policy Objects (GPOs), Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), file servers, storage, virtualization, containers, cloud, clusters, disaster recovery tools, security, and performance management. Upon completion of the course, students will be able to help organizations manage Microsoft Windows 2022 servers. COREQUISITES: Take 150-114 - Network Concepts - CCNA1

150-154
Network Admin Microsoft Azure
Credits: 3.00
In this course, students examine the skills required to configure, manage, secure, and administer key professional functions in Microsoft Azure. They explore Azure Active Directory (AzureAD), governance including subscriptions, storage, computer resources, virtual networking, and monitoring and backing up resources. Upon completion of the course, students will be able to support an organization's cloud infrastructure and be ready to complete the Microsoft Azure Administrator exam. PREREQUISITES: Take 150-119 - Network Admin Microsoft Server 2019 OR 150-153 - Network Admin Microsoft Server 2022 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

150-155
Data Center Technician
Credits: 3.00
In this course, students examine the skills required to support the technical and operational demands of contemporary data centers.They examine infrastructure, installation, and configuration. They investigate monitoring and maintenance, safety and compliance, and troubleshooting. Upon completion of the course, students will be able to ensure that servers, networks, and other critical systems operate safely and efficiently. PREREQUISITES: Take 150-152 - IT Tech Skills; Minimum Grade C

150-181
Cloud Technologies
Credits: 4.00
In this course, learners are introduced to different cloud computing infrastructures. Learners will develop skills for architecting the best cloud infrastructure solution for a business' goals. Cloud virtualization technologies will be examined and cloud solutions will be deployed. Cloud-related virtualization, networking, management, storage, security, and performance will be explored. Upon completion of the course, students will be able to deploy technology solutions within the cloud based infrastructure. PREREQUISITES: Complete course 150-124 - Routing CCNA 2

150-182
IoT: Connecting Devices
Credits: 3.00
In this course, learners are introduced to the interconnection of data, people, processes and things that forms the Internet of Things (IoT). Learners will differentiate among smart devices, connected devices, and Internet of Things (IoT) devices. Machine-to-machine (M2M), machine-to-people (M2P), and people-to-people (P2P) connections in an IoT solution will be examined. Security concerns that must be considered when implementing IoT solutions will be investigated. Upon completion of the course, learners will be able communicate with data over networks to IoT frameworks.

150-183
Virtualization Technologies
Credits: 3.00
In this course, learners are introduced to Enterprise virtualization. Through hands-on experience learners install, configure, and manage virtualized environments. Storage and networking concepts related to virtualization are examined. PREREQUISITES: Take 150-124 - Routing CCNA 2; Minimum Grade C

150-194
Network Security
Credits: 3.00

Students will learn how to maintain security in the workplace. Security plans will be created based on, but not limited to, ten key security technologies: access control, network security, management security procedures, systems development security, cryptography, security models, operations security, disaster recovery, laws and ethics, and physical security.

150-198
Interconnecting Cisco Network Dev P1
Credits: 1.00
640-822 ICND1: Interconnecting Cisco Networking Devices Part 1, this course focuses on providing the skills and knowledge necessary to install, operate, and troubleshoot a small branch office Enterprise network, including configuring a switch, router, and connecting to a WAN and implementing network security. A student should be able to complete configuration and implementation of a small branch office network under supervision. PREREQUISITES: Course 150-124 - Routing CCNA 2 with a minimum grade of C or TR;

150-199
Interconnecting Cisco Network Dev P2
Credits: 1.00
640-816 ICND2: Interconnecting Cisco Networking Devices Part 2 this course focuses on providing the skills and knowledge necessary to install, operate, and troubleshoot a small to medium-size branch office Enterprise network, including configuring several switches and routers, connecting to a WAN and implementing network security. PREREQUISITES: Course 150-135 with a minimum grade of C or TR;

151-121
Cloud Data Security
Credits: 3.00
In this course, students examine key considerations in migrating to cloud computing. They investigate cloud deployment, service models, and cloud infrastructure. Students analyze technologies required to build classic (traditional), virtualized, and cloud data center environments. Upon completion of the course, students will be able to make informed decisions about migrating to the cloud infrastructure and choosing the best deployment model for an organization. PREREQUISITES: Take 151-123 - Cybersecurity OR 150-146;

151-121
AWS Cloud
Credits: 3.00
In this course, students examine key considerations in migrating to cloud computing. They investigate cloud deployment, service models, and cloud infrastructure. Students analyze technologies required to build classic (traditional), virtualized, and cloud data center environments. Upon completion of the course, students will be able to make informed decisions about migrating to the cloud infrastructure and choosing the best deployment model for an organization. PREREQUISITES: Take 151-123 - Cybersecurity OR 150-146;

151-122
Computer Security/ Penetration Test
Credits: 3.00
In this course, students examine network security topics through real-world examples. They explore how and why people attack computers and networks. Students investigate and apply tools and techniques commonly used for penetration testing. Upon completion of the course, students will be able to recognize areas of vulnerabilities in a network environment and provide security solutions for the organization. PREREQUISITES: Take 151-130 - Cisco CyberOps (soc); Minimum grade C,TR;

151-123
Cybersecurity
Credits: 3.00
In this course, students develop ethical offensive and defensive strategies to protect various network configurations. They select tools and technologies to use during simulated attacks. Upon completion of the course, students will be able to analyze and secure network systems.

151-124
Cybersecurity Technologies
Credits: 3.00

In this course, students examine emerging technologies [current trends] in cybersecurity. They differentiate among current industry trends and explore the technology used for specific tools. Students research current cybersecurity software and hardware technology, and they use a variety of media to analyze security topics and utilize the technologies. Upon completion of the course, students will be able to explain the impact of the latest technologies used by cybersecurity experts to defend systems. PREREQUISITES: Take 151-123 - Cybersecurity

151-125
Cybersecurity: Attack & Defend
Credits: 3.00
In this course, learners examine various techniques used by security personnel and hackers to analyze system vulnerabilities. Learners explore techniques to defend systems, investigate system configurations, and examine methods to infiltrate and/or block potential breaches. Upon completion of the course, learners will be able to explain the tools and techniques commonly used for detecting cyber threats and document and report findings using an industry-standard format. PREREQUISITES: Take 151-123 - Cybersecurity

151-130
Cisco CyberOps (soc)
Credits: 3.00
The CCNA Cybersecurity Operations curriculum provides an introduction to the knowledge and skills needed for a Network Security Specialist working with a Security Operations Center (SOC) team. Students learn core security skills needed for monitoring, detecting, investigating, analyzing and responding to security events, thus protecting systems and organizations from cybersecurity risks, threats and vulnerabilities. Upon completion of this course, students can prepare for the Implementing Cisco Cybersecurity Operations (SECOPS) Certification Exam. PREREQUISITES: Course 150-146 or 151-123 - Cybersecurity

151-131
Managing and Configuring Firewalls
Credits: 3.00
In this class, students will gain an in-depth knowledge of how to install, configure, and manage firewalls for the defense of the enterprise network architecture. Students will

also learn the theory, as well as configuration steps for the security, networking, threat prevention, logging, and reporting features of next-generation firewalls. Upon completion of this course, students can install, configure and update next-generation firewalls. PREREQUISITES: Courses 150-146 or 151-123 - Cybersecurity minimum grade C or TR;

151-132
SOC: Monitor/Secure the Infrastructure
Credits: 3.00
Learners will monitor, administer, manage, and control one or more networks. The overall function is to maintain optimal network operations across a variety of platforms, mediums and communications channels. Problems will be introduced into the networks and students will be required to work as a team to troubleshoot and fix the systems in a timely manner. Upon completion of this course, the student should be able to recognize and troubleshoot network issues while maintaining availability. PREREQUISITES: Course 151-130 - Cisco CyberOps (soc)

152-001
Front-End Development with React
Credits: 3.00
In this course, students develop React applications using JavaScript and JSX tags. They examine the architecture of React applications including components, props and states, directives and services. Students create single-page applications that utilize data binding, the React router library and are based on components and JSX. Upon completion of the course, students will be able to create modern single page applications utilizing the React framework to solve a specific development need.

152-080
Databases
Credits: 3.00
In this course, students explore concepts, design, documentation, and implementation of various database systems, including proprietary and open source technologies. Students implement Structured Query Language (SQL) to store, retrieve, and manipulate data. Students create queries, normalize database structures, and create stored procedures. Upon completion of this course, students will be prepared to develop and maintain databases used in application development.

152-081
Programming in Python
Credits: 3.00
In this course, students investigate the fundamentals of computer programming using the Python programming language. Students examine data types, variables, conditional statements, looping, array structures, and structured programming techniques. Upon completion of the course, students will be able to use Python to apply problem solving skills to create applications for delivery to various platforms.

152-083
Web Developer Project
Credits: 3.00
In this course, students examine the fundamental concepts of project management for web projects. Students implement the full project management life cycle, from the basics of getting started (defining the project and scope, prioritizing and estimating features) to developing and deploying the website. Students practice: user interface design, marketing strategies, secure web hosting and domain names, and search engine optimization techniques. Upon completion of this course, students apply project management skills to create a website or application, which they can add to their portfolio, for a business or industry client. PREREQUISITES: Take 801-136 - English Composition 1 Complete course 152-150 - Web Programming 2 or 152-102 - Advanced Web Programming with Minimum Grade C; TAKE 152-188 - PHP Web Programming with Minimum Grade C; Take 801-196 - Oral/Interpersonal Communication OR 801-198 - Speech OR 801-197 - Technical Reporting

152-084
Front-End Development with Angular
Credits: 3.00
This course introduces students to the Angular framework. Students will use Typescript for developing Angular applications. Students learn the architecture of Angular applications including components, directives and services. Students will create single-page applications that utilize data binding, the Angular router, and are based on template-driven and reactive forms. Upon completion students will be able to create modern single page applications utilizing the Angular framework to solve a specific

development need. PREREQUISITES: Complete course 152-097 - Javascript with a minimum grade C minimum grade C;

152-086
Review for Java Certification Exam
Credits: 1.00
This course helps prepare an individual for the Oracle Java certification exam. The focus of the review will be on the topic areas of the certification exam: java basics, java datatypes, operators and decision constructs, arrays, loop constructs, methods and encapsulation, inheritance, handling exceptions and the Java API. This is a one credit review class and not a hands-on lab class. COREQUISITES: Complete course 152-174 - Java Programming 2

152-087
Review for Exam MTA 98-364 (Database)
Credits: 1.00
This course helps prepare an individual for the Microsoft Technology Associate (MTA) Database Fundamentals certification exam. The focus of the review will be on the five topic areas of the certification exam: understanding core database concepts, creating database objects, manipulating data, understanding data storage and administering a database. This is a one credit review class and not a hands-on lab class. COREQUISITES: Complete course 152-146

152-093
IBM Advanced Java Programming
Credits: 3.00
This course will introduce dynamic web application development using Java Servlets and JSP technologies. Moreover databases in web applications and the Java Database Connectivity (JDBC) API will also be covered. Students will also be learning to program Java Applications using XML (Extensible Markup Language), multithreading, I/O, and network programming. Students will be learning to develop N-Tier e-Business applications. PREREQUISITES: Course 152-141 - Java Programming- IBM Systems minimum grade of C or TR; TAKE 152-145 - Internet Programming; MINIMUM GRADE C OR TR; Take 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning; 804-135 - Quantitative Reasoning OR 804-115 - College Technical Math 1

152-097
Javascript
Credits: 3.00
This course will instruct students how to add intuitive, dynamic and animated interaction between their web pages and visitors. Using HTML.5 as a base, we will use Javascript, Ajax, and jQuery library to react to user actions and change webpage structure, content, and appearance. Through this course, students will learn how to dynamically refine, design appearance, control and manipulate HTML elements via the DOM API, and create content within a medium that is used for both desktop and mobile device computing. PREREQUISITES: Complete course 152-182 OR 152-101 - Web Programming with minimum grade of C;

152-101
Web Programming
Credits: 4.00
In this course, students create websites using HTML and CSS and examine effective techniques for succeeding in the Web Software Developer career path. They explore fundamental IT skills, standards-based coding, and web page design techniques. Students practice image manipulation and working with forms, tables, and multimedia. They examine accessibility issues, code validation, web content publishing, and an introduction to JavaScript. Upon completion of this course, students will be able to create a complete website using HTML and CSS for delivery to various platforms.

152-102
Advanced Web Programming
Credits: 3.00
In this course, students develop server-side web applications utilizing the NodeJS platform. They examine advanced web application development focusing on RESTful development techniques and various web Application Programming Interfaces (APIs). Students perform database operations and create data-driven applications using various tools for streamlining application development. Upon completion of this course, students will be able to build a NodeJS server-side application for delivery to various platforms. PREREQUISITES: Take 152-101 - Web Programming or 152-182 Minimum Grade C; Take 152-097 - Javascript; Minimum Grade C;

152-103
Advanced Programming in Python
Credits: 3.00
In this course, students build on basic Python programming skills. They examine advanced programming techniques, explore modern web frameworks, and utilize specialized modules and packages to develop Python applications. They utilize test-driven development (TDD) techniques and various tools for streamlining application development. Upon completion of this course, students will be able to develop robust Python applications for various platforms. PREREQUISITES: Take 152-081 - Programming in Python; Minimum Grade C;

152-104
Web Frameworks
Credits: 3.00
In this course, students explore web applications using a variety of modern web development frameworks. They examine advanced server-side frameworks for creating dynamic data-driven web applications. Students utilize test-driven development (TDD) techniques and various tools for streamlining application development. Upon completion of this course, students will be able to build robust web applications using modern server-side frameworks for various platforms. PREREQUISITES: Take 152-102 - Advanced Web Programming; Minimum Grade C; Take 152-080 - Databases; Minimum Grade C;

152-105
IBM Enterprise Systems Concepts
Credits: 2.00
System i Concepts will provide an overview of the i5 Operating System functions and capabilities. Emphasis will be placed upon utilities intrinsic to the operating system and provide a prelude to the programming environment. Some of the features discussed are file structures, library organization, application development tools, control language commands, and structured query. The course will demonstrate business applications without the use of formal programming languages. The labs will focus on data collection, processing, and reporting. At the end of the course, the learner should be able to access the user support facilities, command prompting, online help, and various commands to organize and manipulate the system. It is the intent of the course

to make the learner knowledgeable and comfortable enough with the platform and operating system to focus on the programming languages supported by i5/OS Operating System. COREQUISITES: Course 107-011 - IT in Business

152-106
Swift Programming 1
Credits: 3.00
In this course, students explore the Swift programming language. They examine Swift language fundamentals, algorithm structures, and basic datatypes. Students use software tools to build graphical applications. Upon completion of this course, students will be able to build applications for multiple Apple platforms.

152-107
Swift Programming 2
Credits: 3.00
In this course, students apply the fundamentals of the Swift programming language. They build on skills acquired in Swift Programming 1. Students use graphical application development tools to build user interfaces. They examine advanced programming techniques, language features, and data structures. Upon completion of the course, students will be able to create iOS apps that adhere to standard practices, UI elements and layout techniques, and common navigation interfaces. PREREQUISITES: Take 152-106 - Swift Programming 1; Minimum Grade of C;

152-108
Web Infrastructure
Credits: 4.00
In this course, students build and manage complete web infrastructure projects. They configure domain names and hosting environments, implement Content Management Systems (CMS), and apply UI/UX principles to real-world scenarios. Students integrate source control, follow project management methodologies, and deploy functional websites. They troubleshoot issues and optimize site performance. Upon completion of the course, students will be able to plan, develop, and launch a website that meets defined project requirements. PREREQUISITES: Take 152-101 - Web Programming Take 152-097 - Javascript COREQUISITES: Take 152-102 - Advanced Web Programming

152-122
Computer Programming RPG/IV (ILE)
Credits: 3.00
Business oriented programming language. Topics include: specification forms, logic cycle, RPG structure commands, physical and logical file structures, externally described printer files, table and array processing, joined logical files, multiple physical files, extensive programming and documentation of business related applications.
PREREQUISITES: Take 152-126 - Programming & Database, Introduction to Concepts
Take 152-133 - IBM Control Language

152-124
Computer Programming C
Credits: 3.00
Learn the principles of object oriented programming using C++. Topics include: formatted 1/10 streams, variables, constants, references, functions, decisions, loops, classes, objects, inheritance, memory management, libraries, and error handlers.
PREREQUISITES: Course 152-126 - Programming & Database, Introduction to Concepts

152-125
Computer Programming RPG/IV (ILE), Adv
Credits: 3.00
Describe and define syntax for constructing online business applications using IBM's High Level Language RPG/400. Competencies learned in RPG/400 are enhanced with additional focus on the following topics: creating sub-file structures, interactive programming techniques, use of arrays and matrixes, creating and using Help screens, introduction to group update techniques and to DB2 relational database.
PREREQUISITES: Course 152-122 - Computer Programming RPG/IV (ILE)

152-126
Programming & Database, Introduction to Concepts
Credits: 4.00
This class will introduce students to the structures, logic, and controls of programming techniques and database applications. Students will be able to develop a program that will utilize a database.

152-131
Systems Design and Development
Credits: 3.00
Introduction to systems development and design concepts. Survey of business applications and their relationship to computers. Students will develop a business system and its associated documentation. PREREQUISITES: Course 152-122 - Computer Programming RPG/IV (ILE) with a minimum grade of C or TR;

152-133
IBM Control Language
Credits: 2.00
AS/400 Control Language (CL) commands, functions, and applications are used in a hands-on environment. PREREQUISITES: Course 152-105 - IBM Enterprise Systems Concepts

152-140
Web Internship
Credits: 3.00
This course establishes an opportunity for the student to apply training and skills in a business/industrial/academic work environment. The student will spend 144 hours at the worksite and contracts with the employer and the instructor regarding the work agreement and competencies. Classroom hours will include preparation of job portfolio materials and practicing interview techniques. PREREQUISITES: Take 152-080 - Databases; Minimum Grade of C; Take 152-101 - Web Programming; Minimum Grade of C;

152-141
Java Programming- IBM Systems
Credits: 3.00
This course introduces the new learner to the Java programming language, specifically as it relates to the IBM iSeries platform. Specific iSeries subjects covered will include using WebSphere Development Studio, accessing AS/400 objects from Java, working with AS/400 databases, and building AS/400 graphical applications. PREREQUISITES:

TAKE 152-105 - IBM Enterprise Systems Concepts TAKE 152-126 - Programming & Database, Introduction to Concepts

152-145
Internet Programming
Credits: 3.00
This introduction to web programming will explore a variety of tools used for web page creation. An introduction to client side internet website programming, this course covers HTML, CSS, DHTML, and JavaScript. PREREQUISITES: Course 152-126 - Programming & Database, Introduction to Concepts

152-149
IBM i System Administration
Credits: 3.00
This course is designed to prepare the student for a junior IBM i administrator position. After completing this course the student will have an in-depth understanding of the IBM i operating system as well as the ability to configure hardware and software on the system. This course provides the student with hands-on exercises configuring IBM i software and hardware.

152-150
Web Programming 2
Credits: 3.00
This course provides an introduction to HTML, CSS, and JavaScript. The course focuses on using HTML/CSS/JavaScript to apply programming logic, define and use variables, perform looping and branching, develop user interfaces, capture and validate user input, store data, and create well-structured applications. This course will help prepare students for exam 70-480. PREREQUISITES: Course 152-182 with minimum grade of C OR TR; TAKE 152-097 - Javascript; MINIMUM GRADE C,TR;

152-151
Microcomputer Programming Advanced
Credits: 3.00
A class in advanced microcomputer programming techniques. This class will examine trends in microcomputer program development including: use of objects, database access, receiving user input, displaying output, error handling, application controls, and online assistance. PREREQUISITES: Course 152-126 - Programming & Database, Introduction to Concepts

152-157
Game Programming I
Credits: 3.00
This course is an introduction to computer game programming. Students will create their own computer games utilizing development tools. Through hands-on work students will learn how to develop a typical game. Topics include graphics, game design, bitmaps, sprites and backgrounds. Students will design, implement, and test interactive computer games. This course requires prior computer programming skills. PREREQUISITES: Course 152-126 - Programming & Database, Introduction to Concepts

152-158
DB2 UDB Programming & Stored Procedures
Credits: 3.00
Exploring the powerful programming features of RDBMS is required in developing enterprise wide applications. This course provides a comprehensive review of DB2 programming using Java, embedded SQL, and stored procedures. This course also discusses advanced RDBMS concepts. This course may only be offered by authorized e-business application advanced career education program providers with IBM authorized instructors, software, and hardware. PREREQUISITES: TAKE 152-126 - Programming & Database, Introduction to Concepts TAKE 152-105 - IBM Enterprise Systems Concepts

152-161
Game Programming Technologies
Credits: 2.00

This class examines modern technologies for computer game development. Students will learn how to install development components. In addition, students will learn how to draw game elements. PREREQUISITES: Course 152-157 - Game Programming I

152-164
Mobile Device Application Programming
Credits: 3.00
This course teaches students to develop applications for mobile platforms. Students will utilize a Software Development Kit (SDK) to develop working applications. PREREQUISITES: Course 152-126 - Programming & Database, Introduction to Concepts or 152-184 - Java Programming 1

152-167
Zend (PHP) Application Prog - IBM SYS
Credits: 3.00
Topics covered include techniques for modernizing traditional applications using i5 Toolkit Utilizing DB2 Storage Engine for mySQL. Development techniques necessary for the full PHP application lifecycle using a comprehensive set of editing, debugging, analysis, optimization, database tools and testing. Zend Studio for Eclipse i5 Edition. PREREQUISITES: Course 152-141 - Java Programming- IBM Systems with a minimum grade of C or TR;

152-168
IBM and .NET Enterprise Programming
Credits: 3.00
Topics covered include advanced .NET tools for creating front end applications for the IBM i. Additional topics include database access using ADO.NET and ASP.Net, XML, Multithreaded and Parallel Programming. The course will also examine advanced .NET topics like WPF and LINQ. PREREQUISITES: Course 152-151 - Microcomputer Programming Advanced with a minimum grade of C or TR;

152-174
Java Programming 2
Credits: 3.00

This course focuses on the advanced language features of Java. Topics will include Java servlets, database access with Java Database Connectivity (JDBC), JavaServer Pages and JavaBeans. A portion of the class deals with application design issues in a web environment as well as connecting to a backed database server. Labs and hands-on projects are a required element to this class and provide the student with experience working with the more advanced features of the Java language. PREREQUISITES: Course 152-184 - Java Programming 1 with a minimum grade of C or TR;

152-178
Developing ASP.NET Web Apps
Credits: 3.00
In this course students will learn to use .NET Framework tools and technologies to develop advanced ASP.NET MVC applications. The focus will be on coding activities that improve performance and scalability of Web site applications. ASP.NET MVC will be introduced and compared with Web Forms so that students know when each should/could be used. This course will help prepare students for exam 70-486. PREREQUISITES: Course 152-182 or 152-101 - Web Programming minimum grade of C AND 152-097 - Javascript OR 152-184 - Java Programming 1 OR 152-081 - Programming in Python minimum grade of C;

152-179
MSCD ASP.NET MVC Review
Credits: 1.00
This course helps prepare an individual for the MCSD ASP.NET MVC Web Applications certification exam. This is the second of four exams that must be passed for an individual to achieve the Microsoft Certified SharePoint Developer certification. PREREQUISITES: Course 152-178 - Developing ASP.NET Web Apps with a minimum grade of C or TR;

152-180
MCSD Server Advanced Review
Credits: 1.00
This course helps prepare an individual for the MCSD Server Advanced Solutions certification exam. This is the last of four exams that must be passed for an individual

to achieve the Microsoft Certified SharePoint Developer certification. PREREQUISITES: Course 152-176 with a minimum grade of C or TR;

152-181
MCSD Server Core Review
Credits: 1.00
This course helps prepare an individual for the MCSD Server Core Solutions certification exam. This is the third of four exams that must be passed for an individual to achieve the Microsoft Certified SharePoint certification. PREREQUISITES: Course 152-177 with a minimum grade of C or TR;

152-184
Java Programming 1
Credits: 3.00
The course introduces the student to the fundamentals of object-oriented programming using the Java programming language. Students will learn the core aspects of Java including how to write and debug Java code. Labs and hands-on projects are a required element to this class and provide the student with experience working with the Java language. COREQUISITES: Course 804-134 - Mathematical Reasoning; 804-135 - Quantitative Reasoning or 804-115 - College Technical Math 1

152-186
Mobile Game Programming
Credits: 3.00
This class is designed to give students a foundation for writing games on mobile devices. PREREQUISITES: Course 152-157 - Game Programming I

152-188
PHP Web Programming
Credits: 3.00
This hands-on PHP Web Programming course provides the knowledge necessary to design and develop dynamic, database-driven web pages. Students will learn how to write and debug PHP code, how to effectively use many of its powerful features, and how to design and build their own PHP web applications. Students will design and create a Web Database usng the popular MySQL DBMS to function as a backend

database for their PHP website. PREREQUISITES: Course 152-182 or 152-101 - Web Programming with a minimum grade of C AND course 152-184 - Java Programming 1 or 152-081 - Programming in Python minimum grade C;

154-109
Computer Support Specialist Internship
Credits: 3.00
Establishes an opportunity for the student to apply training and skills in a business/ industrial/ academic work environment. The student will spend 144 hours at the worksite. Student contracts with the employer and the instructor regarding the work agreement and competencies. Classroom hours will include preparation of job portfolio materials and practicing interview techniques. COREQUISITES: Course 154-113 - IT Apps Server & Support Take 154-114 - Hardware & Software Support

154-112
Data Security & Recovery Support
Credits: 3.00
Focus will be on desktop data security, data retention and recovery. Students will be introduced to computer forensics / data recovery tools, local security issues, disaster recovery plans and legal data requirements (i.e. HIPPA requirements, Sarbanes-Oxley Act, etc.). PREREQUISITES: Course 154-114 - Hardware & Software Support with a minimum grade of C AND course 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning or 804-115 - College Technical Math 1;

154-113
IT Apps Server & Support
Credits: 3.00
Students will learn to resolve operating system and application issues by telephone, remote access, or by visiting an end user's desktop. Students will gain a working knowledge of operating in a workgroup and a client/server environment. NOTE: This course will help prepare the student to take the Microsoft Certified Desktop Technician Exam 70-272. PREREQUISITES: Course 154-114 - Hardware & Software Support with a minimum grade of C or TR;

154-114
Hardware & Software Support
Credits: 3.00
Students will learn to resolve hardware and software issues in a multiplatform environment. Students will troubleshoot and repair various systems and applications, as well as desktop issues. NOTE: This course will help prepare students to attain certifications if desired. COREQUISITES: Take 107-193 - IT Essentials OR 150-152 - IT Tech Skills

154-116
Emerging Technologies & Applications
Credits: 2.00
Students will research, explore and evaluate new and future hardware and software advancements and trends. Areas to investigate may include contemporary package development applications, collaboration tools, reporting software, and innovative equipment and hardware, as well as new versions of current standards in software and applications. PREREQUISITES: Course 154-112 - Data Security & Recovery Support with a minimum grade of C or TR;

154-118
CSS Skills Implementation & Career Prep
Credits: 3.00
This capstone class will provide students with opportunities to apply knowledge and concepts acquired in program coursework. Students will develop proficiency while resolving issues in a simulated, scenario-based environment. In addition to reinforcement of concepts previously covered in the curriculum, the course will include employment seeking skills (resumes, portfolios, interviewing), image creation and deployment, and remote desktop diagnostics/troubleshooting. PREREQUISITES: Complete course 154-113 - IT Apps Server & Support with a minimum grade of C; Take 801-197 - Technical Reporting

154-119
System Software Support
Credits: 3.00
Focus will be on the principles of system software and utilities. This course will enable the learner to effectively configure and troubleshoot system software in multiple

environments. Students will be introduced to integrated tools within the software and the different methods for interacting with system software. Topics will include Windows command-line, Linux GUI and command-line, emulation/connectivity to other non-PC-based systems and network directory services. COREQUISITES: Take 801-136 - English Composition 1

154-120
Advanced Help Service Desk
Credits: 3.00
This capstone class broadens the students' customer service skill set. The course continues to build on end user communication methods, both oral and written. Students will be exposed to Information Technology Infrastructure Library (ITIL) methodology and Help Desk Institute (HDI) best practices. PREREQUISITES: Course 154-122 - Help Service Desk, Intro

154-122
Help Service Desk, Intro
Credits: 3.00
This class broadens the students' customer service skill set. The course continues to build on end user communication methods, both oral and written. Students will be expected to prepare and deliver end user training, create written and online manuals and FAQ's (Frequently Asked Questions), and perform the day-to-day duties in a variety of help desk environments. PREREQUISITES: Course 107-193 - IT Essentials with a minimum grade of C;

154-126
IT Project Management Essentials
Credits: 1.00
This course prepares the student for a foundation in project management. Content includes project management principles, leadership, and team building.

154-130
Google IT Support Professional 1
Credits: 2.00

This course is the first of two required courses for the Gateway Technical College Google IT Professional Certificate and aligns with courses 1 and 2 of the Google IT Support Professional Certificate. Students prepare for an entry-level Information Technology (IT) support role through an introduction to the world of IT and its history. Students explore hardware and software, operating systems, and the Internet to acquire skills related to computer network technologies, protocols, applications, troubleshooting, cloud computing and storage. Upon completion, students relate the fundamentals of IT support to workplace success and are ready to participate in the second Gateway Technical College Google IT Professional Certificate course.

154-131
Google IT Support Professional 2
Credits: 3.00
This is the second of two required courses for the Gateway Technical College Google IT Professional Certificate and aligns with courses 3, 4, and 5 of the Google IT Support Professional Certificate. Students build on the skills acquired in Course 1 to continue their preparation for an entry-level Information Technology (IT) support role. Students analyze operating system components and practice hardware configuration and software and user management tasks. In addition, learners examine systems administration and best practices for selecting hardware, investigate IT security, perform risk evaluation and investigate securing networks. Upon completion of the course, students perform fundamental IT support tasks in support of workplace success and are prepared to seek the Google IT Support Professional Certificate.
PREREQUISITES: Take 154-130 - Google IT Support Professional 1

154-701
Research and Troubleshooting
Credits: 2.00
Provides instruction to IT Service Desk Technician Research and Troubleshooting skills. Apprentices perform research and troubleshooting skills, investigate Service Desk operations, create a support utility kit, correct information and mistakes.

154-702
Service Desk Documentation
Credits: 1.00

Provides instruction to IT Service Desk Technician Documentation skills. Apprentices perform communication and documentation skills related to incorporating information sources, writing procedures, maintaining a knowledge base, preparing reports, presenting oral reports, and developing ticketing skills.

154-703
Service Desk Professional Skills
Credits: 1.00
Provides instruction to IT Service Desk Technician professional skills. Apprentices will develop customer service skills, manage difficult customers, develop professional business skills, work with teams, minimize the effects of stressful situations, and develop time management skills.

156-018
Fundamentals of IT
Credits: 3.00
In this course, students will explore the fundamental aspects of information technology. Students investigate basic hardware systems, various operating systems, important software packages, networking fundamentals, basic internet technologies, and essential problem-solving techniques. Upon completion of the class, students are prepared to utilize their IT skills to work effectively in IT-related tasks. COREQUISITES: Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

156-019
Introduction to Management Info Systems
Credits: 3.00
In this course, students explore information systems and their role in organizations. They examine management decision support systems, system analysis and design methodologies, information processing technologies, and their role in decision making. Students will explore tools and techniques for supporting and executing organizational processes. Upon completion of the course, students will work as a team to design an information systems solution to meet a specific business need. COREQUISITES: Complete course 801-136 - English Composition 1

156-100
Data Analytics 1
Credits: 3.00
In this course, students will learn the basic concepts of data analysis and how they are used to drive business processes. Students will learn to identify and retrieve relevant data sources, and to prepare data for analysis with pre-configured and custom tools. Upon completion of this course, students will be able to prepare data for further analysis to drive decision making for business. PREREQUISITES: Complete course 152-081 - Programming in Python minimum grade C or TR;

156-101
Data Analytics 2
Credits: 3.00
In this course, students will build upon the skills learned in Data Analytics 1. Students will learn to work with large data sets and organize that information for effective data analysis. Students utilize commercial data analysis software packages, and create custom computer programs to analyze data. Upon completion of the course, students will be able to perform analysis of relevant data with various software tools, and use the generated information to help make informed business decisions. PREREQUISITES: Complete course 152-080 - Databases minimum grade C; Take 156-100 - Data Analytics 1; Minimum grade C,TR;

156-102
Introduction to Artificial Intelligence
Credits: 3.00
In this course students will learn basic concepts and applications of Artificial Intelligence (AI), including AI project cycles. Instruction will focus on issues surrounding AI including ethics, bias, culture, regulations. Upon completion of this course students will be able to apply AI concepts to organizational solutions. PREREQUISITES: Take 152-081 - Programming in Python

156-103
Introduction to Machine Learning
Credits: 3.00
In this course students will learn Machine Learning (ML) concepts and Python applications. This will include instruction on data acquisition, supervised and

unsupervised learning, and data modeling. Upon completion of this course students will be able to apply ML concepts to organizational solutions. PREREQUISITES: Take 152-081 - Programming in Python

156-104
Natural Language Processing (NLP)
Credits: 3.00
In this course students will learn the fundamental concepts in Natural Language Processing (NLP) and text processing. Instructions will focus on knowledge and skills necessary to create language recognition applications. Upon completion of the course students will be able to build an application that processes language to apply to an organizational solution. PREREQUISITES: Take 156-102 - Introduction to Artificial Intelligence Take 156-103 - Introduction to Machine Learning

156-105
AI for Computer Vision
Credits: 3.00
In this course students will learn the fundamental concepts in Computer Vision (CV) and image processing. Instruction will include usage of Python CV libraries and building software applications to process images. Upon completion of this course students will be able to build an application to apply to organizational solutions. PREREQUISITES: Take 156-102 - Introduction to Artificial Intelligence Take 156-103 - Introduction to Machine Learning

156-106
Introduction to Generative AI
Credits: 3.00
In this course, students explore the practical applications of Generative AI tools and apply them to real-world tasks. They create AI-driven content across text, image, and data applications. Students evaluate outputs for accuracy, ethics, and effectiveness. They refine prompts to optimize results and adapt workflows for various contexts. Upon completion of the course, students will be able to integrate generative AI tools to solve problems and enhance productivity with purpose, precision, and critical insight.

156-120
Programming in R
Credits: 3.00
In this course, students will learn to use the R programming language to analyze data. Students will learn the syntax and data structures of the R language, and how to apply the language to perform traditional statistical analysis, such as means testing, variable correlations, and linear regressions. Upon completion, students will be able to create R programs to process data and create meaningful output rooted in sound statistical techniques. PREREQUISITES: Complete course 156-100 - Data Analytics 1 minimum grade C or TR; Take 804-189 - Statistics, Introductory

156-125
Business Intelligence and Visualization
Credits: 3.00
In this course, students will learn to organize, manage and analyze very large data sets from various sources. Students will use software tools to present complex data in visually meaningful representations that can be communicated to business stakeholders. Upon completion, students will learn how to transform raw data into meaningful information that will be utilized for data-driven decision making. PREREQUISITES: Complete course 156-101 - Data Analytics 2 minimum grade C or TR; Take 156-120 - Programming in R; Minimum Grade C,TR;

156-130
Data Analytics Capstone
Credits: 3.00
In this course, students apply data analysis techniques to a real world project. Students will interface with a client data source and prepare the data for analysis to help determine the outcome of an industry problem that needs to be solved. Upon completion of this course, students will work in teams to create visualizations, gather business intelligence information, and provide structured data to assist in making a business decision. PREREQUISITES: Take 156-101 - Data Analytics 2 with minimum grade of C or TR; Take 156-120 - Programming in R; Minimum grade C,TR; COREQUISITES: Complete course 156-125 - Business Intelligence and Visualization

182-101
Supply Chain Management
Credits: 3.00
The Supply Chain Management course is designed to examine Supply Chain Management Fundamentals; Procurement, Manufacturing and Operations Management, Transportation and Logistics, Inventory and Warehousing, Demand Planning, Scheduling and Performance Management or Analysis. Topics include creating and executing supply chain strategies that meet customer needs and increase profits; learning how successful supply chain management adds value to your organization; understanding customer loyalty and the lifetime value of a customer; understanding the role of data and information technology in support of the supply chain; and exploring the IT infrastructure as it relates to supply chain management systems.

182-102
Introduction to Logistics
Credits: 3.00
This course prepares the students to be able to explain the historical and economic significance of transportation in US and world economies, utilize the correct transportation terminology, analyze the operating and service characteristics of the five major modes of transportation, differentiate cost and pricing structures of five major modes of transportation, decide the best mode of transportation to use for specific shipments, analyze the forms of special transportation services, and analyze the information technology systems used in the transportation industry. Students in this class will learn the language and benefits of efficient transportation and warehousing strategies.

182-103
Global Supply Chain Management
Credits: 3.00
This course introduces the student to supply chain financial transactions which include foreign exchange markets, fluctuations of the market, role of the global capital market, major determinants in country risk, methods of foreign market entry, international contracts and commercial documents, export packaging, customs clearance, and

global supply chain logistics infrastructure. PREREQUISITES: Course 182-101 - Supply Chain Management with minimum grade C or TR;

182-106
Enterprise Resource Planning & Control
Credits: 3.00
This course will provide the fundamentals of enterprise resource planning (ERP) systems concepts, and the importance of integrated information systems in an organization. The focus of this course is on illustrating procurement, production, and sales business processes using ERP software. This course introduces the world of ERP's to future Supply Chain employees. The understanding of the benefits of technology use within the efficient movement of materials and products is essential in the world of Supply Chain. PREREQUISITES: Courses 182-101 - Supply Chain Management with minimum grade C or TR; Take 801-136 - English Composition 1; Minimum Grade C,TR; Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Minimum Grade C,TR;

182-107
Supply Chain Internship
Credits: 3.00
This course is an occupational experience opportunity within the district for students in their final semester of the Supply Chain Management degree. Instructor consent is mandatory prior to registration for this course. The course will include work-related observation and written reports to the program faculty regarding the practical application of what is learned in the Supply Chain Management Program. It is the student's responsibility to obtain an internship. Students already working in the field of Supply Chain may complete the internship with their current employer if they are given a special project to complete that falls outside of their normal job responsibilities. Time commitment is about 10 Hours per week.

182-108
Purchasing
Credits: 3.00
This course includes an analysis of the purchasing process, a review of purchasing activities, and identification of purchasing problems in modern organizations. Attention

is given to the role of purchasing in the organization, supplier selection, negotiation, sourcing issues, inventory management, and quality concerns.

182-115
Introduction to Manufacturing & Robotics
Credits: 3.00
In this course, learners examine the historical significance of manufacturing and robotics in the US and world economies. Learners identify a wide variety of manufacturing processes and analyze manufacturing systems in terms of material flow and storage, information flow, capacities, and times and durations of events. Learners explore the relationships among the properties of the material, the manufacturing process, and the design of components. Upon successful completion of the course, learners will be able to communicate the language and benefits of manufacturing and robotics.

182-182
Transportation Management
Credits: 3.00
In this course, students explore the complexity of the transportation industry. They examine modes of transportation, regulatory guidelines, and associated economic impact. Students analyze environmental and sociological elements of transportation logistics. Upon completion of the course, students will be able to explain how materials are managed as they move through the supply chain.

182-183
Distribution Management
Credits: 3.00
In this course, students examine the role of warehousing and distribution centers as they relate to business and logistics. They analyze distribution management automation, operations, cost, and safety practices. Upon completion, students will be able to explain the activities and processes associated with the warehousing and movement of inventory throughout the supply chain.

196-123
Problem Solving and Decision Making
Credits: 2.00
Practice sessions on problems faced on the job, problem resolution using various techniques learned in the classroom. Topics: marginal analysis; psychological decision making; cause and effect; intuition; experimental, past experience and follow-the-leader approaches, group problem-solving techniques.

196-133
Negotiations
Credits: 3.00
This course introduces techniques and skills used in bargaining to maximize a company's profits and competitiveness for both domestic and global concessions. Interpersonal negotiations skills are essential for any person working in the business world. Students will be introduced to an interest-based negotiations strategy and to conflict resolution techniques that will prove valuable throughout one's personal and professional life.

196-134
Legal Issues for Supervisors
Credits: 3.00
In Legal Issues for Supervisors, the learner applies the skills and tools necessary for a supervisor to effectively function in today's legal work environment. Each learner will demonstrate the application of legal practices in both union and nonunion environments, the analysis of the impact of U.S. employment laws, the impact of the global economy, and the appeal process. Students will also learn to deal with harassment and privacy issues and summarize legal issues facing contemporary supervisors.

196-136
Safety in the Workplace
Credits: 3.00
In Safety in the Workplace, the learner applies the skills and tools necessary to provide a safe and secure work environment. Each learner will demonstrate the application of safety awareness, federal/state/local compliance, incident investigation and documentation, human relations techniques, safety orientation, inspections, risk

analysis, issues of workplace violence, substance abuse, health hazards, first aid and CPR, fire and electrical safety, emergency preparedness, and liaison with external agencies.

196-136
Safety in the Workplace
Credits: 3.00
In Safety in the Workplace, the learner applies the skills and tools necessary to provide a safe and secure work environment. Each learner will demonstrate the application of safety awareness, federal/state/local compliance, incident investigation and documentation, human relations techniques, safety orientation, inspections, risk analysis, issues of workplace violence, substance abuse, health hazards, first aid and CPR, fire and electrical safety, emergency preparedness, and liaison with external agencies.

196-137
Certified Service Specialist
Credits: 3.00
This course validates the students' interpersonal and business skills by providing the necessary work to prepare for the certification exam to earn the Certified Service Specialist Certification. The exam is the final exam for the course and certifies the student's ability to work with customers. This course explores the skills of communications, policies and procedure manuals, record keeping and evaluating performance. Focus on teams and proper functioning roles within teams in a company setting that values ethical actions in the workplace and respect for the customer and fellow workers. Problem solving, interpersonal relationships and sales and marketing skills will be honed throughout this course. Successful students will be able to represent themselves with a national certification that illustrates their understanding of the skills necessary for the service and manufacturing industry as an employee or employer.

196-151
Operations Management
Credits: 3.00
This course is designed to acquaint students with the specialized vocabulary and problems encountered in manufacturing management. Tools and techniques for solving

production process problems are presented with an emphasis on quality and productivity.

196-156
Leadership Development Capstone
Credits: 3.00
In this course, students apply their knowledge and skills acquired through participation in the Leadership Development Program. Students investigate business management and project management. They examine basic financial reports and the management of employees. They apply leadership skills to change management and conflict resolution related to both individual employees and teams. Upon completion of the course, students will be ready to take the Certified Service Manager Certification exam to illustrate their acquisition of supervisory skills for the service and manufacturing industries. PREREQUISITES: Take 196-137 - Certified Service Specialist Take 196-164 - Personal Skills for Supervisors Take 196-192 - Managing for Quality Take 196-193 - Human Resource Management

196-156
Leadership Development Capstone
Credits: 3.00
In this course, students apply their knowledge and skills acquired through participation in the Leadership Development Program. Students investigate business management and project management. They examine basic financial reports and the management of employees. They apply leadership skills to change management and conflict resolution related to both individual employees and teams. Upon completion of the course, students will be ready to take the Certified Service Manager Certification exam to illustrate their acquisition of supervisory skills for the service and manufacturing industries. PREREQUISITES: Take 196-137 - Certified Service Specialist Take 196-164 - Personal Skills for Supervisors Take 196-192 - Managing for Quality Take 196-193 - Human Resource Management

196-164
Personal Skills for Supervisors
Credits: 3.00
In Personal Skills for Supervisors, the learner applies the skills and tools necessary to deal with time management, stress, and related challenges to a supervisor. Each

learner will demonstrate the application of time management techniques, personal planning, continuous learning, valuing rights and responsibilities of others, effective communication, assertiveness, and dealing effectively with stress. PREREQUISITES: Take 801-136 - English Composition 1 Minimum grade C- Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Minimum grade C-;

196-164
Personal Skills for Supervisors
Credits: 3.00
In Personal Skills for Supervisors, the learner applies the skills and tools necessary to deal with time management, stress, and related challenges to a supervisor. Each learner will demonstrate the application of time management techniques, personal planning, continuous learning, valuing rights and responsibilities of others, effective communication, assertiveness, and dealing effectively with stress. PREREQUISITES: Take 801-136 - English Composition 1 Minimum grade C- Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Minimum grade C-;

196-169
Diversity and Change Management
Credits: 3.00
In Diversity and Change Management, the learner applies the skills and tools necessary to implement and maintain a diverse work environment which values change. Each learner will demonstrate the application of: assessing the current extent of diversity in the workplace; analyzing the effect of perceptions, attitudes, biases, and organizational culture on diversity; dealing with barriers; changing management strategies, processes, and reactions; measuring progress; and celebrating success.

196-188
Project Management
Credits: 3.00
In Project Management, the learner applies the skills and tools necessary to design, implement, and evaluate formal projects. Each learner will: demonstrate the application of the role of project management; develop a project proposal; use relevant software; work with project teams; sequence tasks; chart progress; and deal with variations, budgets, resources, implementation, and assessment.

196-189
Team Building and Problem Solving
Credits: 3.00
In Team Building and Problem Solving, the learner applies the skills and tools necessary to facilitate problem solving in a team environment. Each learner will demonstrate the application of the benefits and challenges of group work, necessary roles in a team, stages of team development, different approaches to problem solving, consensus, a systematic process of problem definition, data acquisition, analysis, the development of alternative solutions, solution implementation, and evaluation.

196-190
Leadership Development
Credits: 3.00
In Leadership Development, the learner applies the skills and tools necessary to fulfill his/her role as a modern leader. Each learner will demonstrate the application of: evaluating leadership effectiveness and organization requirements, using individual and group motivation strategies, implementing mission and goals, observing ethical behavior, developing personal leadership style and adaptation, understanding the impact of power, facilitating employee development, coaching, managing change, and resolving conflict effectively.

196-191
Supervision
Credits: 3.00
In Supervision, the learner applies the skills and tools necessary to perform the functions of a frontline leader. Each learner will demonstrate the application of strategies and transition to a contemporary supervisory role, including day-to-day operations, analysis, delegation, controlling, staffing, leadership, problem-solving, team skills, motivation, and training.

196-192
Managing for Quality
Credits: 3.00
This course is designed to examine the role of the supervisor in assisting an organization to produce a quality product or service. The meaning and benefits of

quality, the cost of quality, how to interact with customers, and problem-solving tools for continuous improvement will be covered.

196-192
Managing for Quality
Credits: 3.00
This course is designed to examine the role of the supervisor in assisting an organization to produce a quality product or service. The meaning and benefits of quality, the cost of quality, how to interact with customers, and problem-solving tools for continuous improvement will be covered.

196-193
Human Resource Management
Credits: 3.00
This course establishes a foundation for development of employee effectiveness by focusing on the supervisor's role in understanding, communicating, and implementing organizational policies. The organizational topics covered include employee hiring, training, performance management, contract compliance, employment law, employee assistance programs, and related topics that affect the supervisor's work group.

201-100
Design Concepts
Credits: 4.00
Students will study typography, color, and layout. Studies include symmetrical and asymmetrical compositions, grid method systems, designing with type, image, and the graphic functions of typography. Students will develop an understanding of the basic design principles, including space, line, form, color, and the use of letterforms and design contrasts to convey a visual message. Students will be introduced to target markets and designing for an audience. Projects will be completed with various design media while exploring the importance of working in stages from research, to rough idea toa finished design.

201-101
Computer Illustration & Drawing Tech
Credits: 3.00

Students will use Vector Illustration software for technical drawing, composition and implementation of created art into print, web and social media. Students will incorporate traditional drawing skills and scanning methods into their digital illustration and drawings. Composition, digital color specification and current graphic design trends will be emphasized.

201-102
Digital Photography/ Introduction to
Credits: 3.00
This course explores the use of digital photography, desktop scanning and photo manipulation software in the creation of photo compositions and support materials for graphic design.

201-102
Digital Photography for Designers 1
Credits: 3.00
This course explores the use of digital photography, desktop scanning and photo manipulation software in the creation of photo compositions and support materials for graphic design.

201-103
Illustration Media Concepts
Credits: 3.00
This course guides students through an organized experimentation of traditional art media to create images that convey specific messages to viewers. A variety of media is used including watercolor, acrylic, oil pastel, inks, dyes, collage, and computers. Good composition, visual organization, development of creative thinking and visual problems will be emphasized. This course will include a study of perspective, light, shade, and color theory. Current illustration and color trends will be explored.

201-104
Webpage Design for Graphic Designers
Credits: 3.00

Students will use GUI software to design, test, publish, and edit web pages that apply basic visual principles and communication strategies. PREREQUISITES: Course 204-107 OR 201-102 - Digital Photography for Designers 1

201-105
Multimedia Survey
Credits: 3.00
This course offers tips on presentation design and the use of multimedia in the graphic design field. Students will learn how to create slides, overheads, and on-screen presentations. Transition effects and the use of sound and video will be incorporated into on-screen presentations. Students will create an interactive portfolio and at least one presentation for class demonstration.

201-106
Design, Publishing and Prepress
Credits: 4.00
This course examines the basic concepts of graphic design page layout and focuses on the principles, equipment, software, and workflow used in the design and publishing process. Students will integrate basic marketing principles in their design strategies and will apply graphic design concepts to produce page layout projects. In so doing, they will understand the primary components of design and publishing; research, strategy, input, composition, project development, and output. Digital prepress fundamentals used in preparing graphic design artwork for printing and publishing will be studied. Color separations, trapping and/or press ready artwork as well as History and discussion of traditional and digital prepress equipment and techniques will be introduced. Customer needs, technical accuracy, pre-press troubleshooting issues, timelines and proofing will be included. PREREQUISITES: Course 204-100 OR 201-100 - Design Concepts

201-107
Graphic Design Professional Practices
Credits: 3.00
This course introduces students to the workflow of graphic design, from the initial conceptualization of a project to the printed piece. Attention to customer needs, development of presentation materials, and cost estimates are discussed. Students will become familiar with graphic design, job titles and duties. Stress management and

time management are incorporated into the course. Legal and ethical issues, as well as those involving copyrights and trademarks, are discussed. PREREQUISITES: Take 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning Complete course 204-140 OR 201-106 - Design, Publishing and Prepress

201-108
Problems in Graphic Design, Advanced
Credits: 3.00
Students will produce advanced level projects in graphic design. Various software applications will be integrated in the creation process. Emphasis will be placed on solving advanced visual problems, creating portfolio quality pieces, participating in classroom critiques and final production options and issues. Students will develop problem-solving techniques to guide them through the process of organizing a complete project, including research, marketing, conceptualization, full design development, file preparation, analysis of the project components, color (ink) selections, paper selection, photography, and various finishing techniques. Reproduction issues including timelines, budgets, ink properties, paper properties and design mechanics will be applied to individual projects. PREREQUISITES: Complete course 204-140 OR 201-106 - Design, Publishing and Prepress

201-109
Design Concepts, Advanced
Credits: 4.00
This course examines advanced concepts of graphic design page layout and focuses on the marketing, software, and workflow used in the design and publishing process. Students will use layout, illustration, and photomanipulation software at an advanced level to create portfolio quality projects. Color usage, scanning principles, file formats, importing of text and graphics will be reinforced. All projects will be properly prepared for commercial production. Students will integrate research and marketing principles in their design strategies. Projects will be presented and critiqued through written and oral presentation processes. PREREQUISITES: Complete course 204-140 OR 201-106 - Design, Publishing and Prepress

201-110
Applied Exit Strategies
Credits: 3.00
Students will focus on resume, portfolio development and interview practices. Career exploration, professional practices and networking will also be discussed. All aspects of this course will lend to the professional development of the individual student. In order to showcase and promote the accomplishments of the student, a graduate design display requirement will be met at the Annual Student Design Show. COREQUISITES: Course 204-109 OR 201-107 - Graphic Design Professional Practices

201-111
Illustration, Advanced
Credits: 3.00
This course will teach students the basics of using 3D software for design. Animation, modeling and storyboarding will be examined, as well as the technical aspects and vocabulary involved in mastering 3D software. 3D computer graphics will be compared to 2D. Practical applications for 3D software will be examined as they relate to graphic design, web design, and game design. PREREQUISITES: Take 201-101 - Computer Illustration & Drawing Tech

201-112
Digital Photography/Advanced
Credits: 3.00
Course focuses on advanced use of photomanipulation software including special effects and new applications. In addition, the basics of good photography and its use in the various areas of graphic design will be studied. PREREQUISITES: Course 204-107 OR 201-102 - Digital Photography for Designers 1

201-112
Digital Photography for Designers 2
Credits: 3.00
Course focuses on advanced use of photomanipulation software including special effects and new applications. In addition, the basics of good photography and its use in the various areas of graphic design will be studied. PREREQUISITES: Course 204-107 OR 201-102 - Digital Photography for Designers 1

304-101
History of Furniture and Decorative Arts
Credits: 3.00
Emphasizes the history of decorative arts from ancient times through the technological era especially concerning furnishings and interiors. Interior design careers, projects and markets are surveyed.

304-102
Interior Design, Principles of
Credits: 3.00
This course will provide the beginning college student with the fundamentals of interior design. Students will explore the elements and principles of art and design as they are applied to interior environments. The learner will also gain knowledge of basic concepts in the design process, human ecology, space planning, selecting finishes and furnishings, and design communications techniques.

304-107
Internship for Interior Designers
Credits: 2.00
Provides an opportunity to gain practical work experience through supervised internships at an approved job site to gain practical knowledge of the interior design skills learned in the classroom. PREREQUISITES: Take 304-116 - Kitchen and Bathroom Planning Minimum grade C,TR; Take 304-132 - Sales and Professional Practice for ID; Minimum grade C,TR; Take 304-154 - Interior Elements Building Construction; Minimum grade C,TR; Take 304-156 - Residential Design Studio 1; Minimum grade C,TR; COREQUISITES: Complete 304-130 - Commercial Design Studio

304-116
Kitchen and Bathroom Planning
Credits: 3.00
Students will develop the skills of planning and remodeling kitchens and bathrooms through drawing methods using the National Kitchen and Bath Association (NKBA) standards. The course provides client-oriented design problems and includes planning

using standard components and fixtures. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Minimum grade C,TR; Take 801-136 - English Composition 1; Minimum grade C,TR; Take 304-129 - Visual Communication for Interior Design; Minimum grade C,TR; Take 304-137 - Advanced Architectural Drawing; Minimum grade C,TR; Take 304-156 - Residential Design Studio 1; Minimum grade C,TR; COREQUISITES: Complete course 304-138 OR 304-157 - Residential Design Studio 2

304-118
Art History
Credits: 3.00
This course will introduce students to art history from the Prehistoric period to the present day from a western perspective. This course will provide an overview of the subject that will be general but comprehensive. It is designed to assist students in being able to identify prevalent movements, periods, and artists throughout this period. Students will learn how to approach art critically, as well as how to interpret and evaluate it, taking into consideration its formal, cultural, and historical contexts.

304-119
Portfolio Presentation
Credits: 1.00
The learner gains knowledge and assistance in preparing a professional portfolio. The course culminates with a portfolio show presenting the students design achievement, body of work, and skills to the professional community.

304-122
Textiles
Credits: 3.00
Students will study the selection, use and care of textile fabrics. All fibers, natural and synthetic, will be dealt with. The most recent technology in construction, finishes and color application will be emphasized.

304-128
Basic Architectural Drawing
Credits: 3.00

This course will introduce students to basic manual and computer-aided drawing for interior design. Students will learn how to properly use equipment and produce two-dimensional drawings. COREQUISITES: Course 801-136 - English Composition 1

304-129
Visual Communication for Interior Design
Credits: 3.00
Development of manual drawing communication skills at an intermediate level for two and three-dimensional representations. Students explore visual presentation techniques and the application of the techniques to interiors, exteriors, furnishings, accessories, and details. Drawings rendered during the various stages of the design process will be executed to reveal the connection between process and presentation. Rendering drawings and various methods of constructing presentations for professional graphic presentations are highlighted. PREREQUISITES: Take 304-128 - Basic Architectural Drawing Minimum grade C,TR; Take 304-102 - Interior Design, Principles of; Minimum grade C,TR;

304-130
Commercial Design Studio
Credits: 4.00
Contract design, also referred to as Commercial Interior Design, is the design of non-residential environments. This course will focus on programming, planning, design and specification of interior space as it relates to various types of commercial spaces such as; offices, health care facilities, hospitality industry, food and beverage facilities, and retail design. Students apply their knowledge of materials, finishes, furniture, lighting and building construction through all phases of the design process. In addition, students further develop CAD skills necessary to produce project documentation and presentations for a comprehensive commercial design problem. PREREQUISITES: Take 304-116 - Kitchen and Bathroom Planning Minimum grade C,TR; Take 304-132 - Sales and Professional Practice for ID; Minimum grade C,TR; Take 304-154 - Interior Elements Building Construction; Minimum grade C,TR; Take 304-156 - Residential Design Studio 1; Minimum grade C,TR; COREQUISITES: Complete course 304-107 - Internship for Interior Designers

304-132
Sales and Professional Practice for ID
Credits: 3.00
Covers essential interior design business practices and procedures, including business formations, fees, contracts, project management, business forms and record keeping. Professional work conduct and interior design sales techniques are also covered. PREREQUISITES: Complete course 304-156 - Residential Design Studio 1 with a minimum grade of C or TR;

304-133
Sustainable Materials and Finishes
Credits: 3.00
Focuses on identifying building materials to satisfy the design criteria. Students will learn appropriate selection of: materials, finishes, and products based on their properties, sustainability, performance criteria, installation methods, and maintenance requirements. Additionally, insight will be gained in procedures within the construction industry from; organizational culture, to the interior designer's role, responsibilities and documentation of specifications.

304-137
Advanced Architectural Drawing
Credits: 3.00
This course will build on the Basic Architectural Drawing coursework and further develop student skills in computer-aided drawing techniques for interior design. Computer-aided three-dimensional modeling will also be introduced and explored as a method to communicate design. PREREQUISITES: Take 304-102 - Interior Design, Principles of Minimum grade C,TR; Take 304-128 - Basic Architectural Drawing Minimum grade C,TR;

304-149
Kitchen and Bath Planning, Advanced
Credits: 3.00
Through this studio, Kitchen and Bath Design students gain advanced approaches to their design solutions, including knowledge of NKBA Planning Guidelines for the kitchen, and NKBA Access Planning Guidelines used in universal design projects. Building upon skills learned in K&B Design, students improve their ability to develop

and present a design concept and theme. In addition, a focus will be learning to produce professional working documents of advanced kitchen projects as they progress from inception to completion. PREREQUISITES: Course 304-116 - Kitchen and Bathroom Planning with a minimum grade of C or TR;

304-150
Architectural History
Credits: 3.00
This course is introductory and assumes no background in architecture or architectural history. It seeks to provide students with an introduction to basic foundations for studying architecture.

304-151
Center for Sustainable Living: Practicum
Credits: 1.00
With the creation of a 'green room' Interior Design students will apply what they have learned in 304-155 Principles of Interior Design and 304-133 Sustainable Materials and Finishes. Students will confirm that preliminary space plans and design concepts are safe, functional, aesthetically appropriate, and meet all public health, safety and welfare requirements, and sustainability guidelines. Students will be performing and learning all duties related to the installation of materials, finishes and products. The space will feature re-purposed furnishings and finishes that promote sustainable and green design. PREREQUISITES: Course 304-133 - Sustainable Materials and Finishes

304-154
Interior Elements Building Construction
Credits: 2.00
This course will introduce students to basic components of building construction, including structural components and mechanical systems. Students will learn basic structural principles applied to the building environment through a review of common building methods including timber frame, masonry, and steel construction for residential and commercial projects as applicable. Sustainable design and the health and welfare of occupants will be considered throughout. PREREQUISITES: Complete course 304-156 - Residential Design Studio 1 with a minimum grade of C or TR;

304-156
Residential Design Studio 1
Credits: 3.00
This course focuses on the problem-solving discipline of the design process and its application to residential design. Students develop concepts to achieve design goals and apply theoretical knowledge and technical skills to their design solutions as they work on a variety of professionally relevant interior design projects. Students will examine the elements of residential interiors through the study of human factors, codes, space planning guides with ADA and universal design, the selection and specification of; furniture, fixtures, equipment, comprehensive lighting solutions, and accessories in planning interior spaces. Projects include the steps of the design process, from programming through design finalization, for residential spaces such as single-family homes, multi-unit residences and other specialized areas. Students will explore various problem solving methods, working in a design team, and presenting design solutions as if working with actual clients. PREREQUISITES: Take 304-102 - Interior Design, Principles of Minimum grade C,TR; Take 304-128 - Basic Architectural Drawing; Minimum grade C,TR; COREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

304-157
Residential Design Studio 2
Credits: 2.00
Students demonstrate their accumulated skills through the resolution of comprehensive residential design projects. PREREQUISITES: Take 304-156 - Residential Design Studio 1; Minimum Grade C;

304-158
Commercial Design Software
Credits: 1.00
An introductory course providing students with the opportunity to become familiar with intelligent, highly visual, and intuitive space-planning software that simplifies specifying and selling commercial design solutions. Upon completion of this course, students will be familiarized with creating and generating layouts, quotes, renderings, movies, installation drawings, and reconfigurations. This course will allow students to apply design solutions and execute projects more efficiently in their capstone course Commercial Design Studio. COREQUISITES: Take 304-157 - Residential Design Studio 2

307-108
ECE: Early Language & Literacy
Credits: 3.00
This course explores strategies to encourage the development of early language and literacy knowledge and skill building in children birth to 8 years of age. Learners will investigate the components of literacy including; literacy and a source of enjoyment, vocabulary and oral language, phonological awareness, knowledge of print, letters and words, comprehension and an understanding of books and other texts. Theories and philosophies regarding children's language and literacy development will be addressed. Dual language learning will be examined within the context of developmentally appropriate practices. Assessment tools for early language and literacy acquisition will be reviewed.

307-110
ECE: Soc S, Art, & Music
Credits: 3.00
This 3-credit course will focus on beginning level curriculum development in the specific integrated content areas of social studies, art, music, & movement (SSAMM).

307-112
ECE: STEM
Credits: 3.00
This 3-credit course will focus on beginning level curriculum development in the specific integrated content areas of science, technology, engineering and mathematics. COREQUISITES: Complete 307-148 - ECE: Foundations of Early Childhood Education

307-115
ECE: Infant Toddler Capstone
Credits: 3.00
This course integrates the theory, practice and reflection of courses 1-3 in the Infant/Toddler Credential and requires demonstration of best practices. PREREQUISITES: Take 307-169 - ECE: Infant Toddler Group Care Take 307-195 - ECE: Family and Community Relationships;

307-140
ECE: Behavior and Emotional Challenges
Credits: 3.00
This course helps promote children's success by building relationships and creating supportive environments and learning how to demonstrate positive social-emotional teaching strategies. Specific discipline and guidance strategies will be described. Individualized intensive interventions for developing behavior support plans as they relate to challenging behavior will be created and evaluated.

307-141
ECE: Spec Health Care Needs
Credits: 3.00
This course explores the frequently encountered specialized health care needs of young children with disabilities. PREREQUISITES: Course 307-187 - ECE: Children with Differing Abilities

307-142
ECE: Inclusion Cred Capstone
Credits: 3.00
This course is designed to enhance the students' understanding of the impact a child with a disability has on the family system. Students will have the opportunity to participate with a child and his/her family in daily routines and community settings. PREREQUISITES: Course 307-187 - ECE: Children with Differing Abilities

307-148
ECE: Foundations of Early Childhood Education
Credits: 3.00
This three-credit course introduces you to the early childhood profession. Course competencies include integrating strategies that support diversity and anti-bias perspectives; investigate the history of early childhood education; summarize types of early childhood education settings; identify the components of a quality early childhood education program; summarize responsibilities of early childhood education professionals; and explore early childhood curriculum models.

307-149
ECE: Child Care Operations Management
Credits: 3.00
This course includes discussion and practical applications related to scheduling, staffing, facilities management, equipment acquisition and maintenance, record keeping, and communication.

307-151
ECE: Infant & Toddler Development
Credits: 3.00
In this three-credit course, you will study infant and toddler development as it applies to an early childhood education setting. Course competencies include integrating strategies that support diversity and anti-bias perspectives; analyze development of infants and toddlers (conception to three years); correlate prenatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine research-based models; and examine culturally and developmentally appropriate environments for infants and toddlers.

307-160
ECE: Field Experience 1
Credits: 3.00
This three-credit introductory field experience course introduces the foundations of early childhood education under the guided supervision of supervising faculty and a mentor teacher in an early childhood setting working with children from birth through age 8. This course meets the requirements for the Wisconsin Model Early Learning Standards 18-hour training. This course includes 36 lecture hours plus 54 hours of field experience in an actual early childhood setting. COREQUISITES: Take 307-148 - ECE: Foundations of Early Childhood Education Take 307-167 - ECE: Health, Safety, & Nutrition Take 801-136 - English Composition 1

307-167
ECE: Health, Safety, & Nutrition
Credits: 3.00
This three-credit course examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Course competencies include:

integrate strategies that support diversity and anti-bias perspectives; follow governmental regulations and professional standards as they apply to health, safety, and nutrition; provide a safe early childhood program; provide a healthy early childhood program; provide a nutritionally sound early childhood program; adhere to child abuse and neglect mandates; apply Sudden Infant Death Syndrome (SIDS) risk reduction strategies; and incorporate health, safety, and nutrition concepts into the children's curriculum.

307-169
ECE: Infant Toddler Group Care
Credits: 3.00
This course focuses on caring for infants and toddlers in center based and family childcare settings. Materials will cover program quality, philosophy, structure, environments, health and safety, and developmentally appropriate practice.

307-170
ECE: Field Experience 2
Credits: 3.00
This three-credit intermediate field experience course includes assisting the mentor teacher in carrying out classroom routines and implementing developmentally appropriate learning experiences that promote child development and learning through play for children from birth to age 8. This course requires 18 hours of lecture and 144 hours of field experience in an actual early education setting. PREREQUISITES: Take 307-160 - ECE: Field Experience 1; Minimum Grade of C COREQUISITES: Take 307-179 - ECE: Child Development

307-179
ECE: Child Development
Credits: 3.00
This three-credit course examines child development within the context of the early childhood education setting. Course competencies include analyzing social, cultural, and economic influences on child development; summarize child development theories; analyze development of children age three through eight; summarize the methods and designs of child development research; and analyze the role of heredity and environment.

307-181
ECE: Child Care Operations Management
Credits: 3.00
This is course two in the Administrator Credential. This course includes discussion and practical applications related to early care and education program scheduling, staffing, facilities management, equipment acquisition and maintenance, record keeping and communication.

307-182
ECE: Child Care Financial Management
Credits: 3.00
This course includes principles and practices in budget planning, preparation and fiscal management, including hands-on preparation with program applications.

307-184
ECE: Child Care External Environment
Credits: 3.00
Review of external factors which affect the operation of early care and education programs including determination of community childcare needs, marketing, laws and regulations, working with government and community agencies, political and social issues and trends.

307-185
ECE: Child Care Best Practices
Credits: 3.00
Establishing and maintaining quality programs based on professional standards and the best available information on child growth and development and family friendly environment/services. Coursework includes a review of the literature and research studies, licensing laws and regulations, criteria for staff credentials (CDA) and the accreditation of programs by the National Academy of Early Childhood Programs and funding requirements and performance standards such as those for Head Start.

307-186
ECE: Child Care Administrator Capstone
Credits: 3.00
This is the culminating experience in the Administrator Credential course sequence. Major individual projects are required with a focus on the integration of program aspects in developing strategic planning for change. Prerequisites: Courses 1 through 5 of the Administrator Credential course sequence. COREQUISITES: Complete courses 307-204 - ECE: Child Care Admin and Supervision, 307-181 - ECE: Child Care Operations Management, 307-182 - ECE: Child Care Financial Management, 307-184 - ECE: Child Care External Environment, and 307-185 - ECE: Child Care Best Practices

307-187
ECE: Children with Differing Abilities
Credits: 3.00
This three-credit course focuses on the child with differing abilities in an early childhood education setting. Course competencies include integrating strategies that support diversity and anti-bias perspectives; provide inclusive programs for young children; apply legal and ethical requirements including, but not limited to, ADA and IDEA; differentiate between typical and exceptional development; analyze the differing abilities of children with physical, cognitive, health/medical, communication, and/or behavioral/emotional disorders; work collaboratively with community and professional resources; utilize an individual educational plan (IEP/IFSP) for children with developmental differences; adapt curriculum to meet the needs of children with developmental differences; and cultivate partnerships with families who have children with developmental differences.

307-188
ECE: Guiding Children's Behavior
Credits: 3.00
This three-credit course examines positive strategies to guide children's behavior in the early childhood education setting. Course competencies include integrating strategies that support diversity and anti-bias perspectives; summarize early childhood guidance principles; analyze factors that affect the behavior of children; practice positive guidance strategies; develop guidance strategies to meet individual needs; and create a guidance philosophy.

307-190
ECE: Field Experience 3
Credits: 3.00
This 3-credit advanced field experience course focuses on supporting young children's development from birth to age 8 through observation, assessment, and implementation of developmentally appropriate teaching strategies. This course requires 18 hours of lecture and 144 hours of field experience in an actual early childhood setting. PREREQUISITES: Take 307-170 - ECE: Field Experience 2 Take 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning COREQUISITES: Take 307-151 - ECE: Infant & Toddler Development

307-195
ECE: Family and Community Relationships
Credits: 3.00
In this three-credit course, you will examine the role of relationships with family and community in early childhood education. Course competencies include implementing strategies that support diversity and anti-bias perspectives when working with families and community; analyze contemporary family patterns, trends, and relationships; utilize effective communication strategies; establish ongoing relationships with families; advocate for children and families; and work collaboratively with community resources.

307-198
ECE: Administering an Early Childhood Education Program
Credits: 3.00
This three-credit course focuses on the administration of an early childhood education program. Course competencies include integrating strategies that support diversity and anti-bias perspectives; analyze the components of an ECE facility; design an ECE program; analyze the aspects of personnel supervision; outline financial components of an ECE program; apply laws and regulations related to an ECE facility; and advocate for the early childhood profession.

307-204
ECE: Child Care Admin and Supervision
Credits: 3.00
This course provides an overview of roles and responsibilities of directors, coordinators, supervisors and other administrators in early childhood programs.

307-210
ECE: Field Experience 4
Credits: 3.00
This final 3-credit pre-professional field experience course focuses on demonstrating a comprehensive understanding of children birth to age 8, and families. An emphasis is on practicing the lead teacher role to design, implement and evaluate a connected unit of learning experiences. This course requires 18 hours of lecture and 144 hours of field experience in an actual early childhood setting. PREREQUISITES: Take 307-190 - ECE: Field Experience 3; Minimum Grade of C; Take 307-110 - ECE: Soc S, Art, & Music; Minimum Grade of C; Take 307-108 - ECE: Early Language & Literacy; Minimum Grade of C; Take 307-112 - ECE: STEM; Minimum Grade of C;

316-105
International Cuisine
Credits: 4.00
Organization and service of buffets are stressed. Includes menu planning, cost control and dining room set up. Emphasis is placed on preparation and cooking of international cuisine. PREREQUISITES: Take 316-156 - Restaurant Cuisine OR 316-132 - Culinary Skills II minimum Grade of C

316-105
International Buffets
Credits: 4.00
Organization and service of buffets are stressed. Includes menu planning, cost control and dining room set up. Emphasis is placed on preparation and cooking of international cuisine. PREREQUISITES: Take 316-156 - Restaurant Cuisine OR 316-132 - Culinary Skills II minimum Grade of C

316-109
Short Order Deli
Credits: 3.00
This course provides learners with the opportunity to practice short order food preparation including frying, grilling, sandwich making, salad, and dessert preparation.

Menu planning and cost analysis is presented. PREREQUISITES: Take 316-152 - Intermediate Culinary OR 316-131; Minimum Grade C

316-125
Fine Dining
Credits: 4.00
Training in the duties of a waiter is given including table setting, taking orders and placing in the kitchen and clearing the table. Students also learn how to set up foods in the service line, serve hot and cold foods, prepare beverages and keep a flow of foods in the service line. PREREQUISITES: Take 316-156 - Restaurant Cuisine OR 316-132 - Culinary Skills II; Minimum Grade C Take 316-109 - Short Order Deli; Minimum Grade C Take 316-153 - Garde Manger/Cold Kitchen OR 316-134 - Garde Manger; Minimum Grade C Take 316-154 - Advanced Baking; Minimum Grade C Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning Take 801-136 - English Composition 1

316-130
Nutrition
Credits: 2.00
Basic principles and current nutritional concepts are explored with emphasis on meeting the nutritional needs of various individuals. PREREQUISITES: Take 316-170 - Sanitation and Hygiene; Minimum Grade C

316-132
Culinary Skills II
Credits: 4.00
Students reinforce knowledge and skills learned in Culinary Skills I to begin building on that knowledge. Includes cooking luncheon menus, garnishing, plate presentation and kitchen management. PREREQUISITES: Course 316-131 COREQUISITES: Course 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

316-133
Menu Planning Purchasing Cost Control
Credits: 3.00
Menu planning as affected by acceptability, cost, labor requirements, available space and equipment. Principles of purchasing, receiving, issuing and managing food products, restaurant wares and equipment. Study and utilization of several systems used in the food service business to provide management information in food and beverage cost.

316-134
Garde Manger
Credits: 1.00
Preparation of decorative meats and centerpieces and decorating and arranging food platters for buffet presentation.

316-135
Catering/Banquets
Credits: 2.00
Practical experience in organizing, menu planning, room set-up, preparation, cooking and serving banquets of various sizes. PREREQUISITES: Course 316-132 - Culinary Skills II

316-138
Basic Baking
Credits: 2.00
This course presents basic baking techniques and procedures related to food service operations. Use and care of equipment are presented. Sanitation and hygiene considerations are reviewed. COREQUISITES: Take 316-170 - Sanitation and Hygiene Take 316-131

316-139
Convenience Baking
Credits: 1.00

This course presents convenience baking techniques and procedures related to food service operations. Use and care of equipment are presented. Sanitation and hygiene considerations are reviewed. COREQUISITES: Take 316-170 - Sanitation and Hygiene Take 316-131

316-140
Basic Baking Techniques
Credits: 3.00
This course presents basic baking techniques and convenience baking techniques and procedures related to food service operations. Use and care of equipment are presented. Sanitation and hygiene considerations are reviewed.

316-150
Culinary Basics 1
Credits: 4.00
In this course, learners explore the basic scientific principles of food preparation and knife handling skills. They examine the preparation of stocks, soups, sauces, vegetables, and starches and prepare basic foods. Learners explore the relationship between planning and organization and work techniques. Upon completion of the course, learners will be able to demonstrate basic knife handling skills and cooking techniques and explain the significance of standards of finished products and the conversation of nutritive values. COREQUISITES: Take 316-170 - Sanitation and Hygiene

316-150
Culinary Basics
Credits: 4.00
In this course, learners explore the basic scientific principles of food preparation and knife handling skills. They examine the preparation of stocks, soups, sauces, vegetables, and starches and prepare basic foods. Learners explore the relationship between planning and organization and work techniques. Upon completion of the course, learners will be able to demonstrate basic knife handling skills and cooking techniques, and explain the significance of standards of finished products and the conversation of nutritive values. COREQUISITES: Take 316-170 - Sanitation and Hygiene

316-151
Basic Baking
Credits: 4.00
In this course, learners explore the fundamental concepts of baking. Through hands-on application, they examine basic skills and techniques using production equipment. Learners prepare a variety of cookies, cakes, breads, pies, and custards. They explore the relationship between planning and organization and work techniques. Upon completion of the course, learners will be able to explain the characteristics and functions of baking ingredients and to prepare a variety of standard baked products.
COREQUISITES: Take 316-170 - Sanitation and Hygiene

316-152
Culinary Basics 2
Credits: 4.00
In this course, learners explore the basic scientific principles of protein preparation and enhance their knife skills. They examine the preparation of meats, poultry, fish, shellfish, and eggs, and prepare basic foods. Learners continue to explore the relationship between planning and organization and work techniques, while growing their confidence. Upon completion of the course, learners will be able to demonstrate basic knife handling skills and cooking techniques, and explain the significance of standards of finished products and the conversation of nutritive values.
PREREQUISITES: Take 316-170 - Sanitation and Hygiene; Minimum Grade C Take 316-150 - Culinary Basics or 316-131; Minimum Grade C

316-152
Intermediate Culinary
Credits: 4.00
In this course, learners explore the basic scientific principles of protein preparation and enhance their knife skills. They examine the preparation of meats, poultry, fish, shellfish, and eggs, and prepare basic foods. Learners continue to explore the relationship between planning and organization and work techniques, while growing their confidence. Upon completion of the course, learners will be able to demonstrate basic knife handling skills and cooking techniques, and explain the significance of standards of finished products and the conversation of nutritive values.
PREREQUISITES: Take 316-170 - Sanitation and Hygiene; Minimum Grade C Take 316-150 - Culinary Basics or 316-131; Minimum Grade C

316-153
Garde Manger/Cold Kitchen
Credits: 3.00
In this course, learners examine cold food preparation techniques. They explore the principles of curing, pickling, and sausage-making, and they prepare and creatively present a variety of salads and dressings, condiments, hors d'oeuvres, and cheeses. Learners examine the relationship between planning and organization and work techniques. Upon completion of the course, learners will be able to explain the effective design and presentation of cold foods and to produce a cold food display and present it creatively. PREREQUISITES: Take 316-150 - Culinary Basics OR 316-131; Minimum Grade C Take 316-170 - Sanitation and Hygiene Minimum Grade C

316-154
Advanced Baking
Credits: 3.00
In this course, learners examine advanced baking techniques. They develop enhanced skills required to produce a variety of pastry doughs and intricate pastries. Learners analyze the relationship between planning and organization and work techniques. Upon completion of the course, learners will be able to explain the standards of the finished products from concept and design to packaging and to display and create doughs and pastries that meet professional standards for taste and appearance. PREREQUISITES: Take 316-151 - Basic Baking OR 316-140 - Basic Baking Techniques; Minimum Grade C Take 316-170 - Sanitation and Hygiene Minimum Grade C

316-155
Culinary Internship
Credits: 2.00
In this course, learners engage in a student-centered, practical experience designed to help them relate their academic knowledge to occupational skills and requirements. Using a hands-on approach, learners work under the guidance of an industry professional to expand their career knowledge and experiential confidence. Upon completion of the course, learners will be able to execute industry skills on a repetitive basis with enhanced knowledge, speed, organization, and confidence. PREREQUISITES: Take 316-152 - Intermediate Culinary OR 316-131; Minimum Grade

C Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning
COREQUISITES: Take 801-136 - English Composition 1

316-156
Culinary Basics 3
Credits: 4.00
In this course, learners explore food preparation as it applies to restaurant service. They examine menu planning and cost analysis of menu items. Learners focus on the relationship between planning and organization and work techniques. Upon completion of the course, learners will create and execute basic menus to serve the public, while utilizing correct technique and sanitation principles. PREREQUISITES: Take 316-152 - Intermediate Culinary OR 316-131; Minimum Grade C

316-156
Restaurant Cuisine
Credits: 4.00
In this course, learners explore food preparation as it applies to restaurant service. They examine menu planning and cost analysis of menu items. Learners focus on the relationship between planning and organization and work techniques. Upon completion of the course, learners will create and execute basic menus to serve the public, while utilizing correct technique and sanitation principles. PREREQUISITES: Take 316-152 - Intermediate Culinary OR 316-131; Minimum Grade C

316-157
Food Service Operations
Credits: 3.00
In this course, learners explore the practical skills and knowledge required for effective food and beverage service operation in front-of-the-house foodservice environments. Learners examine organizational systems and the elements of planning, staffing, and leadership, and they model commitment to a safe and sanitary environment through their consistent execution of food safety principles. Upon completion of the course, learners will have earned ServSafe Manager certification and will be able to demonstrate skills required for flawless food and beverages. COREQUISITES: Take 316-125 - Fine Dining

316-157
Managing Food Service Operations
Credits: 3.00
In this course, learners explore the practical skills and knowledge required for effective food and beverage service operation in front-of-the-house foodservice environments. Learners examine organizational systems and the elements of planning, staffing, and leadership, and they model commitment to a safe and sanitary environment through their consistent execution of food safety principles. Upon completion of the course, learners will have earned ServSafe Manager certification and will be able to demonstrate skills required for flawless food and beverages. COREQUISITES: Take 316-125 - Fine Dining

316-170
Sanitation and Hygiene
Credits: 1.00
A study of sanitary conditions and the methods used in applying the measure effectively. Includes organisms responsible for food contamination, spoilage, and the diseases transmitted by food. Personal health habits are necessary for food service personnel and the laws regarding sanitary practices are interpreted.

316-190
Food Service Supervision
Credits: 3.00
How to fulfill a leadership role; how to organize resources of people, time, equipment and jobs; how to motivate people and communicate effectively with subordinates; how to select, interview and appraise employees; how to handle problems of discipline, morale and grievances.

401-301
AC System Diagnosis & Repair
Credits: 3.00

In this course, students explore air conditioning system operation, diagnostics, and repair techniques. They identify common system failures - including refrigerant issues, electrical malfunctions, and mechanical wear - and they apply effective repair strategies in accordance with industry standards. Students examine applicable state and federal regulations, including Environmental Protection Agency (EPA) guidelines, to ensure all work is performed in compliance with legal and environmental requirements. Upon completion of the course, students will be able to diagnose and repair a wide range of air conditioning system problems and will be prepared to take industry-recognized certification exams, such as the EPA Section 608 Certification, required for professional HVAC technicians. PREREQUISITES: Take 601-110 - Air Conditioning Fundamentals OR 401-310 - Air Conditioning Fundamentals

401-304
Electricity and Electronics for HVAC
Credits: 3.00
In this course, students explore electrical principles and theory. Using standard testing equipment, students measure and troubleshoot equipment. Students practice wiring and installing a variety of electrical devices and systems. Upon completion of the course, students will be able to install, troubleshoot, and repair electrical components of air-conditioning, heating, and refrigeration systems. PREREQUISITES: This course is part of a priority placement program and registration is limited to program students with Core-Active status, new program students with priority placement authorization, and students in non priority placement programs that also require this class. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

401-310
Air Conditioning Fundamentals
Credits: 3.00
Topics covered include air conditioning principles and terms, physical principles of air movement and humidity, methods of conditioning air for comfort and health, the proper use of psychrometers, dry bulb thermometers, hygrometers, pilot tubes, recorders, manometers and barometers and the reading and interpretation of psychometric charts and scales. COREQUISITES: Take 601-116 - Mechanical Fundamentals or 401-316 - Mechanical Fundamentals This course is part of a priority placement program and

registration is limited to program students with Core-Active status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

401-316
Mechanical Fundamentals
Credits: 3.00
Topics covered include learning the various types of piping and tubing used in air conditioning and refrigeration, types of fittings, bending, brazing and soft soldering tubing, black iron pipe work, sheet metal fundamentals, using hand tools, and the recognition and practice of safety procedures while working on air conditioning and refrigeration systems. COREQUISITES: 601-110 - Air Conditioning Fundamentals or 401-310 - Air Conditioning Fundamentals This course is part of a priority placement program and registration is limited to program students with Core-Active status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

401-321
Heating Systems
Credits: 3.00
Topics in this course include introduction to heat principles, temperature measurement, fuels and other sources of heat, combustion, basic heating systems, basic furnace design, gas furnace design and operation, venting of furnaces, chimney or exhaust gases and system controls. PREREQUISITES: Course 601-110 - Air Conditioning Fundamentals OR 401-310 - Air Conditioning Fundamentals

401-328
Electrical Controls and Systems
Credits: 3.00

Topics in this course include basic electricity review, control circuits, three phase motors, single phase motors, solid state devices, control components and troubleshooting using control schematics and solid-state controls. PREREQUISITES: Complete course 601-304 - Electricity and Electronics for HVAC OR 401-304 - Electricity and Electronics for HVAC COREQUISITES: Complete course 804-370 - Mathematics I/Applied

401-329
HVAC Systems
Credits: 3.00
Topics include the installation and proper startup procedures of residential HVAC systems. Areas covered will be the installation of forced air heating equipment with a focus on the sheet metal, gas piping, venting and electrical hookups necessary to meet all code requirements. Also covered will be the installation of refrigerant lines, evaporator coils, and placement of the condensing unit. Students will leak check, evacuate and perform startup checks verifying superheat, subcooling, airflow and other vital parameters. PREREQUISITES: Take 601-110 - Air Conditioning Fundamentals OR 401-310 - Air Conditioning Fundamentals Take 601-116 - Mechanical Fundamentals OR 401-316 - Mechanical Fundamentals

401-331
Heating Systems Applications
Credits: 3.00
Topics include installation and service of heating and humidifying systems, including steam and hydronic heat distribution systems, heat pumps and complete air conditioning systems and heat recovery systems. PREREQUISITES: Course 601-121 - Heating Systems OR 401-321 - Heating Systems

401-333
Refrigeration Fundamentals
Credits: 3.00
Topics include refrigeration principles and terms, thermodynamic processes, refrigerants, vapor compression cycles, mechanical refrigeration system components, use of electrical controls, refrigeration applications and refrigeration tools and materials. COREQUISITES: Take 601-110 - Air Conditioning Fundamentals or 401-310 - Air Conditioning Fundamentals Take 601-116 - Mechanical Fundamentals or 401-316

- Mechanical Fundamentals This course is part of a priority placement program and registration is limited to program students with Core-Active status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

401-343
Refrigeration Applications
Credits: 3.00
Topics include commercial refrigeration systems, applications, installation, servicing, troubleshooting, heat loads and piping, absorption systems and special refrigeration systems. PREREQUISITES: Take 601-110 - Air Conditioning Fundamentals OR 401-310 - Air Conditioning Fundamentals Take 601-116 - Mechanical Fundamentals OR 401-316 - Mechanical Fundamentals Take 601-133 - Refrigeration Fundamentals OR 401-333 - Refrigeration Fundamentals

401-345
Electronic Energy Management
Credits: 3.00
Topics include an introduction to the role of computers in the heating, ventilation and air conditioning industry, microcomputer systems and applications, programming and direct digital control (DDC). COREQUISITES: Complete course 601-147 - Control Circuit Applications OR 401-347 - Control Circuit Applications

401-347
Control Circuit Applications
Credits: 3.00
Topics include an introduction to control circuit terminology, measuring devices and control systems. The principles of self-contained, pneumatic and electronic-electric controls are examined and applied to control systems operation and design. PREREQUISITES: Complete course 601-128 - Electrical Controls and Systems OR 401-328 - Electrical Controls and Systems and complete course 804-370 - Mathematics I/Applied with a minimum grade C or TR

401-501
Introduction to HVAC
Credits: 1.00
This introductory course introduces the student to the terminology used; the basic math concepts relevant to the HVAC industry and basic electrical concepts are covered.

401-502
Tube and Piping Skills
Credits: 1.00
This course introduces the mechanical skills necessary to identify, select, and construct plastic, copper and ferrous tubing and pipe to industry and Code standards.

401-506
Forced Air Heating Intro to
Credits: 1.00
The theory of heating using air as the medium is introduced. The common components of each fuel are covered and how efficiency changes affects the heating cycle. The importance of proper venting and vent design and basic troubleshooting are introduced.

401-508
Cooling Fundamentals
Credits: 1.00
This course introduces the student to the concepts of heat transfer, the refrigeration cycle and use of the P/T chart. Evacuation, recovery, leak detection and basic troubleshooting are covered.

401-509
Troubleshooting HVAC
Credits: 1.00
Expanded troubleshooting of gas, electric furnaces and central air forced air systems are covered in detail.

401-560
Comm/Ind Refrigeration & Alt. Systems
Credits: 1.00
This week will deepen the students' understanding of the complex controls and operation of large scale refrigeration equipment. The week will also introduce the student to emerging technologies that have not been used on a large scale to date. Geothermal, radiant, waste heat, and other alternatives are explored.

401-561
Heating & Cooling Design
Credits: 1.00
Use of construction drawings, the fundamentals of heat loss/gain, equipment selection, and the fundamentals of leadership are covered in the student's final week.

401-562
Commercial Concepts, Advanced
Credits: 1.00
This week broadens the knowledge base for the fourth year student. Topics include the effects of water quality on cooling towers, boilers and chillers, proper startup/shutdown of physical plants, and how new energy conservation equipment is being used in HVAC.

401-563
IAQ/DDC Controls & Air Balancing
Credits: 1.00
This week covers the factors that affect IAQ, the use of automated controls in our energy management, and the effects of proper airflow on comfort in structures.

401-564
Heat Pumps
Credits: 1.00

This week moves the student from the introduction of the fundamentals of heat pump technology to component identification and troubleshooting of the various kinds of heat pumps. Students are also introduced to customer relation principles as they move towards their last year.

401-565
Refrigerant; Advanced Topics
Credits: 1.00
This week covers troubleshooting techniques a student needs when working on A/C and refrigeration systems. This week also introduces the student to the emerging VRF, ductless and zoned systems that have entered into the marketplace.

401-566
Troubleshooting HVAC Systems
Credits: 1.00
This intense week contains concentrated review of troubleshooting techniques for fuel fired appliances, motors, and controls. The correct use of installation fasteners, terminal connectors, and hardware are also covered.

401-567
Hydronics & Steam Systems
Credits: 1.00
This week expands on the student's general knowledge of hydronics by covering individual components, their function, and operation. The student is then introduced to the operation of unique controls of steam plants.

401-568
Venting & Introduction to Hydronics
Credits: 1.00
This week is split between the complex requirements for venting fuel burning appliances and introducing the student to the basics of hydronic heating concepts and the components used.

401-569
Alternating Current and PM Basics
Credits: 1.00
This week expands on the student's basic understanding of AC electricity by covering motors, transformers and other loads found in HVAC equipment. This week also covers basic preventative maintenance procedures for typical HVAC equipment.

401-570
Ductwork Construction & Airside Basics
Credits: 1.00
This week covers the selection and fabrication of common materials used in ductwork applications and the uses of those delivery systems in commercial buildings.

401-571
Mechanical Refrigeration Circuit
Credits: 1.00
This comprehensive week focuses on the major working components of a mechanical refrigeration device. Refrigerant oils, types of refrigerants, leak detection, recovery and proper charging techniques are covered in depth.

402-120
Aeronautical Decision Making
Credits: 2.00
The student will apply theories and procedures learned in Aviation Safety in simulated flight conditions. Analysis and evaluation of student actions, individual and as a flight crew, will be completed for each flight scenario. PREREQUISITES: Course 402-173 - Professional Piloting II with minimum grade C or TR COREQUISITES: Course 402-138 - Aero Science Aviation Safety

402-122
Aircraft Systems-Advanced
Credits: 3.00
This lecture based course covers the principles of turbine engine theory and operation. Turbine aircraft systems are studied, including pressurization, anti and de-ice systems, pneumatic and hydraulic systems and aircraft control systems. Advanced electronic and navigation systems are learned. Low and high performance aircraft structures are evaluated and compared. FAR's pertaining to advanced aircraft are learned and applied to a daily flight routine. PREREQUISITES: Course 402-139 - Aero Science Engine/ Structures/ Systems

402-123
Aircraft Systems Advanced
Credits: 2.00
This lecture based course covers the principles of turbine engine theory and operation. Turbine aircraft systems are studied, including pressurization, anti and de-ice systems, pneumatic and hydraulic systems and aircraft control systems. Advanced electronic and navigation systems are learned. FAR's pertaining to advanced aircraft are learned and applied to a daily flight routine. PREREQUISITES: Complete 402-139 - Aero Science Engine/ Structures/ Systems minimum grade C;

402-129
Aviation/Introduction
Credits: 3.00
An introductory aviation ground course designed to prepare the student for the FAA Private Pilot Airplane written examination.

402-131
Aero Science Fundamentals of Instruction
Credits: 2.00
An advanced aviation ground course designed to prepare the student for the FAA Fundamentals of Instruction written examination. PREREQUISITES: Course 402-133 - Aero Science Commercial minimum grade C or TR;

402-133
Aero Science Commercial
Credits: 3.00
An advanced aviation ground course designed to prepare the student for the FAA Commercial Pilot Airplane written examination. PREREQUISITES: Course 402-140 OR 402-129 - Aviation/Introduction with a minimum grade of C or TR;

402-134
Aero Science Certified Flight Instructor Airplane
Credits: 2.00
An advanced aviation ground course designed to prepare the student for the FAA Airplane Flight Instructor written examination. COREQUISITES: Course 402-145 - Flight/Certified Flight Instructor Airplane

402-135
Aero Science Aerophysics/ Aerodynamics
Credits: 3.00
Principles of physics as applied to the flight topics of velocity and acceleration and application to take-off and landing performance. Lift, gravity, thrust and drag relationships in accelerated and unaccelerated flight are included. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Take 801-136 - English Composition 1

402-136
Aero Science Aviation Weather
Credits: 3.00
Covers basic concepts of aviation meteorology including temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing and fog. Analysis and use of weather data for flight planning and safe flying and interpretation of U.S. Weather Bureau maps, reports and forecasts are discussed.

402-137
Aero Science Instrument
Credits: 3.00

An advanced aviation ground course designed to prepare a student for the FAA Instrument Airplane rating written examination. PREREQUISITES: Take 402-129 - Aviation/Introduction

402-138
Aero Science Aviation Safety
Credits: 3.00
This course will develop the student's awareness and understanding of the safe, legal, and efficient operation of an aircraft in the modern aviation environment. This will be accomplished through the study of specific listed topics, NTSB reports, and presentation by aviation professionals. PREREQUISITES: Take 402-137 - Aero Science Instrument Take 402-180 - Private Pilot III

402-139
Aero Science Engine/ Structures/ Systems
Credits: 3.00
Principles of aircraft engine theory and operation including construction, lubrication, carburetion, ignition, supercharging and propellers. Principles of aircraft structures including basic stresses, types of construction, advantage of each type and an overview of FAA repair procedures.

402-145
Flight/Certified Flight Instructor Airplane
Credits: 2.00
Prepares the commercial rated pilot for the FAA flight instructor airplane certificate. PREREQUISITES: Course 402-177 - Professional Piloting IV with minimum grade C or TR COREQUISITES: Take 402-134 - Aero Science Certified Flight Instructor Airplane Take 402-131 - Aero Science Fundamentals of Instruction

402-146
Flight Certified Instructor Instrument
Credits: 1.00
Prepares the CFI for the addition of an instrument instructor rating to the flight instructor certificate. PREREQUISITES: Course 402-145 - Flight/Certified Flight Instructor Airplane with minimum grade C or TR

402-166
Aeronautical Skills Development
Credits: 1.00
This flight course will prepare the student for the completion of an FAA certificate or rating.

402-170
Professional Piloting I
Credits: 3.00
This is the first in a series of four courses approved as an FAA Part 141 combined commercial instrument certification course. This course will focus on instrument flying skills. Additionally, the student will receive experience operating a multi-engine aircraft. PREREQUISITES: Complete course 402-140 OR 402-180 - Private Pilot III with minimum grade of C COREQUISITES: Complete 402-137 - Aero Science Instrument

402-173
Professional Piloting II
Credits: 2.00
In this course, students with existing private pilot certification develop instrument skills. This course is approved as an FAA Part 141 Instrument certification course. This course will focus on the addition of an instrument rating to the student's existing private pilot certificate. Flight instruction will be conducted in a single-engine aircraft. Upon completion of the course under Part 141, students will receive an endorsement for the FAA Instrument Airplane Practical test. COREQUISITES: Complete course 402-137 - Aero Science Instrument

402-175
Professional Piloting III
Credits: 2.00
In this course, students participate in the second of three flight courses approved for the FAA Part 141 combined commercial/instrument certification. Upon completion of this course under part 141, students will have met the cross country aeronautical

experience requirements for our FAA Part 141 approved combined commercial/instrument certification course. PREREQUISITES: Course 402-173 - Professional Piloting II with minimum grade C COREQUISITES: Course 402-133 - Aero Science Commercial

402-177
Professional Piloting IV
Credits: 2.00
In this course, students participate in the third of three flight courses approved for FAA Part 141 combined commercial/ instrument certification. Students focus on flight training to acquire skills necessary to meet the requirements of the FAA Commercial Pilot Certification. Upon completion of the course under Part 141, students will receive an endorsement for the FAA Commercial Pilot Airplane Practical test. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Take 801-136 - English Composition 1 COREQUISITES: Course 402-175 - Professional Piloting III

402-178
Private Pilot I
Credits: 2.00
In this course, learners will build the foundational skills needed to perform a solo flight in a single-engine aircraft. Learners develop skills including preflight planning and inspection, airport and traffic pattern operations, aircraft control including takeoffs, landings, stalls, and applied aerodynamics. Upon completion of this course, learners will have acquired a minimum set of skills to safely operate an airplane from preflight through engine start, taxi, takeoff, flight to the practice area, return from the practice area, entry to the traffic pattern, landing, shutdown and securing the aircraft. PREREQUISITES: Take 402-136 - Aero Science Aviation Weather; Minimum Grade C Take 402-129 - Aviation/Introduction; Minimum Grade C; COREQUISITES: Take 402-181 - Private Pilot Theory and Application I

402-179
Private Pilot II
Credits: 1.00
In this course, learners build on basic aircraft operation and control skills to navigate the airplane by visual references and radio navigation aids and at night. Upon

completion of this course, learners will be able to plan and execute pilotage, dead reckoning and night flights, complete and maintain a navigation log, and to safely fly solely by reference to the instruments. PREREQUISITES: Take 402-178 - Private Pilot I; Minimum Grade C COREQUISITES: Take 402-129 - Aviation/Introduction

402-180
Private Pilot III
Credits: 1.00
In this course, learners apply aeronautical knowledge and practice the aeronautical skills of maneuvering and cross-country flight needed to meet the minimum standards required to qualify for a private pilot certificate. Upon completion of this course, learners will be able to demonstrate the knowledge, skill, and risk management requirements and will recieve an endorsement for an FAA Private Pilot Practical Exam. PREREQUISITES: Take 402-179 - Private Pilot II; Minimum Grade C COREQUISITES: Take 402-129 - Aviation/Introduction

402-181
Private Pilot Theory and Application I
Credits: 1.00
In this course, learners will apply pre-solo level private pilot ground knowledge to actual and simulated scenarios presented by the instructor. Upon completion of this course, learners will have demonstrated the ability to apply private pilot aerodynamics, aircraft systems and instruments, regulations, weather, and airport operations knowledge of scenarios presented by an evaluator in oral and practical examination settings. PREREQUISITES: Take 402-129 - Aviation/Introduction; Minimum Grade C+ Take 402-136 - Aero Science Aviation Weather; Minimum Grade C+ COREQUISITES: Take 402-178 - Private Pilot I

402-182
Private Pilot Theory and Application II
Credits: 1.00
In this course, learners will apply private pilot ground knowledge to actual and simulated scenarios presented by the instructor. Upon completion of this course, learners will have demonstrated the ability to apply private pilot aerodynamics, aircraft systems and instruments, regulations, weather, airport operations, navigation, and human factors knowledge to scenarios presented by an evaluator in oral and practical

examination settings. PREREQUISITES: Take 402-178 - Private Pilot I; Minimum Grade C Take 402-181 - Private Pilot Theory and Application I; Minimum Grade C

402-184
Commercial I Multiengine Introduction
Credits: 1.00
In this course, learners will build the foundational skills needed to perform basic operations in a multiengine aircraft. Learners develop skills including preflight planning and inspection, aircraft control including takeoffs, landings, stalls, applied aerodynamics and emergency operations. Upon completion of this course, learners will have accrued 10.5 (ten and one-half) multiengine hours, 3 (three) hours in an advanced aviation training device and have acquired the minimum set of skills necessary to safely operate a multiengine airplane from preflight through engine start, taxi, takeoff, normal flight maneuvers and emergencies to include single-engine operations, landing, shutdown and securing the aircraft. PREREQUISITES: Take 402-180 - Private Pilot III; Minimum Grade C

402-185
Commercial II Instrument Procedures I
Credits: 1.00
In this course, learners will build the foundational skills needed to perform basic operations in the National Airspace System under Instrument Flight Rules. Learners develop skills including instrument takeoffs, precise airplane attitude control solely by reference to the airplane instruments, flight at minimum controllable airspeed, stalls, steep turns, unusual attitudes, partial panel operations, radio navigation, cross-country planning and holding procedures. Upon completion of this course, learners will have accrued 17.5 (seventeen and one-half) advanced aviation training device hours and have acquired the minimum set of skills necessary to properly perform takeoffs, basic flight maneuvers, stalls, unusual attitudes, cross- country flight planning and holding procedures in the simulated IFR environment. COREQUISITES: Take 402-184 - Commercial I Multiengine Introduction; Minimum Grade C Take 402-137 - Aero Science Instrument

402-186
Commercial III Instrument Procedures II
Credits: 1.00

In this course, learners will build the advanced skills needed to perform complex operations in the National Airspace System under Instrument Flight Rules. Learners develop skills including precision and non- precision approaches and cross-country flight in the National Airspace Space system under Instrument Flight Rules. Upon completion of this course, learners will have accrued 11 (eleven) advanced aviation training device hours and have acquired the minimum set of skills necessary to properly instrument approach procedures and cross- country flight in the simulated IFR environment. PREREQUISITES: Take 402-185 - Commercial II Instrument Procedures I; Minimum Grade C COREQUISITES: Take 402-137 - Aero Science Instrument

402-188
Instrument Procedures I
Credits: 1.00
In this course, learners will build the foundational skills needed to perform basic operations in a single-engine aircraft in the National Airspace System under Instrument FlightRules. Learners develop skills including instrument takeoffs, precise airplane attitude control solely by reference to the airplane instruments, flight at minimum controllable airspeed, stalls, steep turns, unusual attitudes, partial panel operations, radio navigation, cross-country planning, and holding procedures in a single-engine aircraft. Upon completion of this course, learners will have accrued 15 (fifteen)hours in a single-engine aircraft, 4 (four) hours in an advanced aviation training device, and have acquired the minimum set of skills necessary to properly perform takeoffs, basic flight maneuvers, stalls, unusual attitudes, cross-country flight planning and holding procedures in the IFR environment in a single-engine aircraft. PREREQUISITES: Take 402-137- Aero Science Instrument; Minimum Grade C Take 402-186 - Commercial III Instrument Procedures II; Minimum Grade C COREQUISITES: Take 402-190 - Instrument Theory/Application;

402-189
Instrument Procedures II
Credits: 1.00
In this course, learners will build the advanced skills needed to perform complex operations in the National Airspace System under Instrument Flight Rules in a single-engine aircraft. Learners develop skills including precision and non-precision approaches and cross-country flight in the National Airspace Space system under Instrument Flight Rules in a single-engine aircraft. Upon completion of this course, learners will have accrued 25 (twenty-five) hours in a single-engine aircraft and have

acquired and demonstrated the minimum set of skills necessary to qualify for an endorsement for the Federal Aviation Administration (FAA) Instrument Rating Practical Examination. PREREQUISITES: Take 402-188 - Instrument Procedures I; Minimum Grade C COREQUISITES: Take 402-190 - Instrument Theory/Application

402-190
Instrument Theory/Application
Credits: 2.00
In this course, learners will apply instrument rating ground knowledge to actual and simulated scenarios presented by the instructor. Upon completion of this course, learners will have demonstrated the ability to apply instrument procedures, aerodynamics, aircraft systems and instruments, regulations, weather, airport operations, navigation and human factors knowledge to scenarios presented by an evaluator in oral and practical examination settings. PREREQUISITES: Take 402-186 - Commercial III Instrument Procedures II; Minimum Grade C

402-192
Commercial IV Cross Country
Credits: 2.00
In this course, learners will apply pre-flight planning strategies while planning and executing cross-country flights in multi-engine and single-engine aircraft. The course includes a combination of dual instruction and solo practice. Upon completion of this course, learners will have accrued 26 (twenty-six) hours in a single-engine aircraft, 22 (twenty-two) hours of time in a multi-engine aircraft, and 3 (three) hours in an advanced aviation training device. Learners will demonstrate the minimum set of skills necessary to properly perform cross-country navigation, planning, weather interpretation, and decision-making. PREREQUISITES: Take 402-189 - Instrument Procedures II; Minimum Grade C COREQUISITES: Take 402-193 - Commercial V Basic Maneuvers

402-193
Commercial V Basic Maneuvers
Credits: 1.00
In this course, learners will be introduced to the required Commercial Pilot maneuvers in a single-engine aircraft. The course includes a combination of dual instruction and solo practice. Upon completion of this course, learners will have accrued 23 (twenty-three) hours in a single engine aircraft and 4.5 (four and a half) hours of time in

the advanced aviation training device. Learners will demonstrate the minimum set of skills necessary to properly perform Commercial Airplane Single Engine Land flight maneuvers, performance takeoffs and landings, stalls in a single-engine aircraft. COREQUISITES: Take 402-192 - Commercial IV Cross Country

402-194
Commercial VI Advanced Maneuvers
Credits: 1.00
In this course, learners will build the advanced skills needed to perform complex operations in the single and multi engine aircraft. This course includes a combination of dual instruction and solo practice. Upon completion of this course, Learners will have accrued 8 (eight) hours of flight time in a single engine airplane, 11 (eleven) hours in the multiengine aircraft, and 4 (four) hours in an advanced aviation training device. Learners will have acquired and demonstrated the minimum set of skills necessary to qualify for an endorsement for the Federal Aviation Administration (FAA) Commercial Pilot multiengine land and single engine land practical examinations. PREREQUISITES: Take 402-193 - Commercial V Basic Maneuvers; Minimum Grade C

402-196
Flight Proficiency I
Credits: 1.00
In this course, learners will, at the level appropriate to the certificate they hold, practice short, soft, crosswinds and normal takeoffs and landings, rejected landings and takeoffs and emergency procedures. Upon completion of this course, learners will have accrued 8 (eight) hours in a single-engine aircraft, and will demonstrate the minimum set of skills necessary to properly perform traffic pattern and ground operations in a single engine aircraft appropriate to the level of the certificate they hold. PREREQUISITES: Take 402-184 - Commercial I Multiengine Introduction; Minimum Grade C COREQUISITES: Take 402-185 - Commercial II Instrument Procedures I

402-197
Flight Proficiency II
Credits: 2.00
In this course, learners will, at the direction of their instructor, practice flight maneuvers and procedures applicable to the certificate being sought. Upon completion of this course, learners will have accrued up to 16 (sixteen) hours in a single-engine aircraft or

7.5 (seven and one half) hours in a multi engine aircraft and will demonstrate the minimum set of skills necessary to properly perform flight maneuvers and procedures applicable to the certificate being sought. PREREQUISITES: Take 402-180 - Private Pilot III; Minimum Grade C

412-105
Diesel Control Systems, Advanced
Credits: 4.00
This course will continue to develop the knowledge and skills required to troubleshoot, repair and maintain heavy duty vehicle control systems. Emphasis will be placed on the skills that are required of a technician to utilize advanced electronic diagnostic tools. Topics include multiplex systems, active and inactive codes, system reprogramming intermittent codes (EBS), electronic braking systems, control systems and hydraulic control systems. The theory and operation of the Global Positioning System (GPS) and related systems will be covered. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-115 - Diesel Hydraulic Systems; Minimum Grade C Take 412-117 - Diesel Suspension & Steering Systems; Minimum Grade C

412-106
Diesel Brake Systems
Credits: 4.00
This course will develop the knowledge and skills required to troubleshoot, repair and maintain heavy duty vehicle braking systems. Hydraulic and pneumatic drum and disc systems will be covered. This course will help prepare for ASE certification. PREREQUISITES: Take 412-111 - Diesel Maintenance Fundamental Minimum Grade C

412-107
Diesel Electricity 1
Credits: 4.00
This course will develop the basic knowledge and skills required to troubleshoot, repair and maintain basic electrical/electronic systems that are utilized on today's heavy duty vehicles. Emphasis will be placed on the Direct Current (DC) fundamentals and vehicle charging and starting systems. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-111 - Diesel Maintenance Fundamental

412-108
Diesel Electricity 2
Credits: 3.00
This course will focus on the development of troubleshooting and repair skills as they relate to electrical systems found on heavy duty vehicles. An emphasis will be placed on the understanding and application of electronic diagnostic tools and their application to modern heavy duty vehicles. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-107 - Diesel Electricity 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

412-109
Diesel Engine Service
Credits: 5.00
This course provides the student with the knowledge and skills required to maintain basic diesel engines. Students will gain practical experience in rebuilding, testing, and troubleshooting by disassembling a diesel engine, inspecting its components, explaining their function and reassembly. Diesel engine cooling and lubrication systems will be included. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-110 - Diesel Fuel Systems

412-110
Diesel Fuel Systems
Credits: 3.00
This course develops the knowledge and skills required to maintain basic diesel fuel systems. Operation and troubleshooting of system components such as fuel supply systems, fuel injection pumps and injectors, intake systems, turbo chargers and exhaust systems will be included. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-116 - Diesel Preventative Maintenance; Minimum Grade C

412-111
Diesel Maintenance Fundamental
Credits: 2.00

The student will develop the knowledge and skills to operate in today's heavy duty vehicle repair facility. Shop safety, hazardous material handling, hand tool identification and tool and personal safety will be emphasized. Skills development will be stressed in the areas of precision measurement instrument usage, basic mechanical skills, and basic wiring skills. Additionally, the course will include instruction on use of electronic information services, hard copy shop manuals and Wisconsin automotive practice regulations (ATCP132.)

412-112
Diesel Drive Trains
Credits: 4.00
The student will develop the knowledge and skills required to troubleshoot, repair and maintain heavy duty vehicle power trains. Topics will include clutches, manual transmissions, drive shafts, universal joints, and drive axles. This course will help the student prepare for ASE certification. COREQUISITES: Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

412-113
Diesel Fuel Systems, Advanced
Credits: 3.00
The student will develop the knowledge and skills required to troubleshoot and repair advanced heavy duty vehicle fuel systems. Fuel designs and characteristics (including alternative fuels), electronic management control and emission control systems will be emphasized. Exploration of diesel hybrid systems will be included. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-108 - Diesel Electricity 2 Take 412-110 - Diesel Fuel Systems

412-114
Diesel Heating, Cooling & Air Cond
Credits: 3.00
This course will develop the knowledge and skills required to troubleshoot, repair and maintain heavy duty vehicle heating, cooling and air-conditioning systems. Students will be required to take and pass the federal and state air-conditioning certification. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-107 - Diesel Electricity 1 COREQUISITES: Take 801-136 - English Composition 1

412-115
Diesel Hydraulic Systems
Credits: 2.00
This course will provide the application of basic hydraulic principles as they relate to typical heavy duty vehicle applications. The student will develop the knowledge and skills required to diagnose, service and repair and maintain hydraulic systems and components including valves, pumps, and cylinders. Servicing, diagnosing and preventive maintenance procedures will be performed on trucks and other equipment. This course will help the student prepare for ASE certification. PREREQUISITES: Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning Course 412-111 - Diesel Maintenance Fundamental

412-116
Diesel Preventative Maintenance
Credits: 3.00
The student will develop the knowledge and skills that are required to conduct preventative maintenance on today's heavy duty vehicles. Students will become familiar with established industry standards and regulations (state and federal) and the NORTH AMERICAN out of service criteria. Vehicle inspections will be conducted on both on and off road vehicles with emphasis on component identification and inspections and preventative maintenance services. This course will help the student prepare for ASE certification. PREREQUISITES: Take 412-111 - Diesel Maintenance Fundamental Minimum Grade C

412-117
Diesel Suspension & Steering Systems
Credits: 3.00
This course will focus on the skills and knowledge required for today's technician to effectively diagnose, service and repair heavy duty suspension systems. Analysis of the construction and working principles of chassis components including vehicle frames, suspension systems, steering systems, wheels and tires will be covered along with wheel alignment. This course will help the student prepare for ASE certification. PREREQUISITES: Course 412-111 - Diesel Maintenance Fundamental

412-118
I/C Engines
Credits: 3.00
This course provides the student with knowledge of gas and diesel engine theory. Its focus will be operation, maintenance, and repair of diesel and gasoline powered engines. Lubrication and cooling systems will also be covered. PREREQUISITES: Course 412-121 - Shop Tools and Safety Principles or TR

412-119
Mobile Electrical Systems
Credits: 3.00
This course introduces the student to electrical theory in terms of voltage, amperage, resistance, and impedance in various circuits. Operation and troubleshooting methods using multimeters will be covered. Students will learn how to read and utilize electrical schematics and symbols. Batteries, starting circuits, charging circuits and electrical accessories will be covered.

412-120
Mobile Hydraulic Systems
Credits: 3.00
This course introduces the students to the fundamentals of fluid power, components, different hydraulic systems, hydraulic schematics and terminology of the hydraulic systems used on modern mobile equipment. Includes operation of fluid flow on various systems, maintenance, and system diagnostics.

412-121
Shop Tools and Safety Principles
Credits: 2.00
This course will introduce the student to the diverse mechanical skills required in today's service and repair facilities for mobile equipment. The student will demonstrate, through practical hands-on lab exercises, the proper care and use of common hand and power tools. General drilling, tapping, threading, and proper lifting and supporting various mobile equipment will also be focused on. The student will also be required to use test instruments to gather data on length, volume, area, depth, and torque. Safety is stressed in this course.

412-123
Diesel Equipment Technology Internship
Credits: 3.00
In this internship, students will participate in a planned diesel equipment technology learning experience in the workplace. Through direct occupational experience, students will participate in the supervised performance of maintenance, troubleshooting, and repair activities of diesel components. Worksite activities will focus on advanced fuel systems, engine overhaul, advanced control systems, and hydraulics. PREREQUISITES: Courses 412-116 - Diesel Preventative Maintenance or TR Take 801-196 - Oral/Interpersonal Communication

412-127
Construction Hydraulic Systems
Credits: 4.00
This course will provide the conditioned development of hydraulic principles and understanding of compounds used in heavy and light equipment. The student will experience activities with advanced hydraulic components including, disassembly and assembly of pumps, motors, accumulators, mechanical and electrical controlled hydrostatic systems. Servicing, diagnosing and preventive maintenance procedures will also be performed on heavy equipment. Through participation in this course, students can prepare for AED Technical Assessments. PREREQUISITES: Complete courses 412-108 - Diesel Electricity 2 412-109 - Diesel Engine Service 412-111 - Diesel Maintenance Fundamental 412-115 - Diesel Hydraulic Systems 412-126 or TR

413-501
Arithmetic and Introduction to Algebra For Electrical Crafts
Credits: 1.00
This course is an intensive review of arithmetic, with emphasis on common and decimal fractions, ratio and proportion, percentage, systems, units of measurement, conversions, and square root. An introduction to algebra, including terminology, additive functions, grouping symbols, axioms, basic procedures, multiplication, and division, is included.

413-502
Electrical Circuitry Algebra and Trigonometry
Credits: 1.00
This course covers sign numbers, grouping symbols, factoring equations in one unknown, fractions, fractional equations, exponents and radicals, solution of simultaneous equations, and an introduction to factors.

413-503
Basic AC/DC Current Motor Control
Credits: 1.00
This course is an introduction to DC and AC motor control concepts. Topics include: fundamental concepts of electricity and magnetism, three phase motors, single-phase motors, DC motors and generators, and DC motor controls.

413-506
Electrical Theory I/Construction
Credits: 4.00
Introduces the apprentice to the basic electrical concepts of structure of matter, electron theory; Ohm's law for series-parallel circuits; volt and current measurements; conductors and resistors; electrical power and energy; and the National Electrical Code.

413-510
Motor Control
Credits: 1.00
The principal objective is to present the fundamentals of motor control by developing the ability to read and draw control circuits given many control problems using schematic, wiring and piping diagrams.

413-516
Electrical Theory II/Construction
Credits: 4.00

413-519
Microprocessors/Advanced
Credits: 4.00
This course provides an in-depth study of 16-bit MP's including terms, architecture, programming, interfacing, assembly language, addressing modes, memory, logic and control lines, dynamic and static ram, and input/output interfacing using the 8088 MP.

413-526
Electrical Theory III/Construction
Credits: 4.00

413-528
Direct Current Fundamentals
Credits: 1.00
This course covers electron theory, Ohm's Law, series and parallel circuits, power, Kirchoff's Law, work effective heat torque, motor sizes, wire sizes, voltage drop, wiring systems, and kinds of wire insulation.

413-529
Single Phase AC Fundamentals
Credits: 1.00
This course covers properties of alternating current, AC measurement, inductance and inductive resistance, capacitance and capacitive resistance, impedance, series and parallel AC circuits, resonance, and power and power factor correction.

413-536
Electrical Theory IV/Construction
Credits: 4.00

413-538
Alternating Current Fundamentals
Credits: 1.00

This course covers alternators, rotating magnetic fields, AC motors, speed control, types of winding, and an introduction to AC motor control.

413-539
National Electric Code (BAT)
Credits: 1.00
This course is a study of national and local electrical codes for wiring and apparatus. It covers wiring design and protection, wiring methods and materials, general use equipment, special occupancies, special equipment, and the use of tables and diagrams for the solution of practical wiring problems.

413-540
Automation Circuits & Introduction to Programmable Logic Controllers
Credits: 1.00
This course is an introduction to programmable controllers, specifically the Allen Bradley SLC-500. It covers basic instructions, programming software, input and output files, timers and counters, and programming instructions.

413-546
Electrical Theory V/Construction
Credits: 4.00

413-548
Programmable Logic Controllers I
Credits: 1.00
This course is an introduction to programming techniques, hardware configuration, and theory of operation of a programmable logic controller. The Modicon industrial controller is the system to be studied.

413-557
AC Electricity
Credits: 2.00

This course is designed to introduce the industrial electrical student to the basic concepts of alternating current. Emphasis is placed on circuit analysis and the problem solving skills necessary for the maintenance of modern industrial electric systems.

413-558
Codes 2: OCPD/Electrical Device Install
Credits: 0.50
In this module of Codes for Industrial Electricians, students will learn how to plan for the installation of overcurrent protection devices and how to select the proper boxes, cabinets and conduits for industrial electrical installations as called for in the NEC and other electrical codes.

413-559
Codes 3: Article 250 Part A
Credits: 0.50
This course examines the application of grounding to industrial electrical situations as required by the NEC and other electrical codes.

413-562
Codes 4: Article 250 Part B
Credits: 0.50
This course examines Article 250 and grounding applications for industrial electrical installations. Students will complete their review of this portion of the NEC and examine additional related codes in effect across Wisconsin.

413-563
Codes 5 Art.300, Crds/Cble, Haz Install
Credits: 0.50
This course examines Article 300 of the NEC and wiring methods for industrial electrical applications. Students will determine sizing requirements for cords and cables for installations common to industrial facilities. This course will identify code requirements for equipment installations in hazardous locations.

413-564
Codes 6 Cond., Raceways, Data/Comm Cabl
Credits: 0.50
This course covers the selection of proper conductors and raceways for industrial electrical installations as required by the NEC and other electrical codes. Course competencies will include examining the installation requirements for data and communication cables.

413-569
Codes 7: Motors and Generators
Credits: 0.50
This course reviews the code requirements for the selection of electrical components for typical industrial electrical motor installations. Course module includes sizing of controls, conductors, switches, branches, and more.

413-570
Codes 8: Transformers
Credits: 0.50
This course reviews the electrical code requirements which provide for the protection of various industrial transformer installations. Course competencies include developing plans, sizing equipment and components, safety,and references to applicable sections of the NEC.

413-571
Codes 1: Introduction to NEC
Credits: 0.50
This course introduces the student to the layout and purpose of the National Electric Code. It will teach the student proper methodology to research a code question and correctly interpret what is read. Students will research the structure of the NEC and define the requirements of the code that are common to all electrical installations. Students will examine the installation requirements for fire pumps, emergency systems and fire alarms.

413-576
DC Electricity
Credits: 2.00
This course introduces the fundamental concepts of and computations related to DC electricity. Emphasis is placed on circuit analysis and the problem solving skills necessary for the maintenance of modern industrial electric systems. Competencies related to metering and safe use of measuring devices are included.

413-577
Motor Controls 1
Credits: 1.00
This course will lead the student through the fundamentals of electric motor control. Students will learn to recognize and draw the basic symbols, the language of motor control, and how to apply these symbols into current industrial format. Students will learn to draw and read ladder and wiring diagrams. Students will be introduced to the logic used in motor control and be required to apply this logic in order to correctly interpret, design, and wire control circuits.

413-578
Motor Controls 2
Credits: 1.00
This course will examine motor controls applicable to the industrial electrician trade.

413-579
Motor Controls 3
Credits: 1.00
This course examines motor controls applicable to the industrial electrician trade. Applications and assessment activities are intended in this course.

413-586
Motors and Generators
Credits: 1.00
This course introduces concepts, terminology, and safety. This course is designed to give the student the knowledge required by industry to maintain electric motors and

generators. This course will cover DC motors and generators, single phase motors as well as alternators.

413-587
Power Systems & Variable Speed Drives
Credits: 2.00
This course provides the opportunity for students to learn about power systems and variable speed drives. Topics include electricity, electronics, power transmissions, motor operations, AC and DC motor drives, servo and stepper drives, peripherals and communication. Students will also explore closed loop control, feedback devices, and drive maintenance and the troubleshooting of VSD's.

413-588
Solid State Electronics
Credits: 2.00
This course provides the student with the skills and knowledge for troubleshooting basic solid-state devices and circuits. The construction, identifications, and operating characteristics of solid-state devices is investigated. The student builds test circuits, gathers and analyzes data, and follows safety procedures. Methods for locating defective components are applied. The replacement of printed circuit board components is performed. Also examined is the effect of temperature on the operation of solid state devices.

413-589
Transformers
Credits: 1.00
This course is designed to introduce the Industrial Electrician student to the basic concepts of single and three-phase transformers. The course will cover transformer theory, turns, current and voltage ratios as well as proper connections and use of various transformers.

413-595
Fluid Power Systems - Hydraulics
Credits: 0.50

The hydraulics course is customized for Industrial Electricians and relates the basics of hydraulic theory and hydraulic components. Safety and the interrelationship between hydraulic power with electrical control is emphasized.

413-596
Fluid Power Systems - Pneumatics
Credits: 0.50
This is a pneumatics course customized for industrial electrician students who deal with fluid power systems. This course will relate the basics of pneumatic theory and pneumatic components. Safety and the interrelationship between pneumatic power with electrical control is emphasized.

413-597
Green Awareness for the E & I Trades
Credits: 1.00
Green Awareness for the E&I trades examines new and emerging technologies influenced by green trends which are impacting work processes today and in the future. The course introduces students to green related knowledge and skills. Green topics covered in this course include energy efficiency; energy conservation; changes in state, national and local codes; lighting alternatives; alternative energy generation; energy efficient motors, drives, controllers and equipment; eliminating toxic materials and reducing wastes; and specific 'green' applications for the various trades involved under the E & I trades.

413-598
Programmable Logic Controllers 1
Credits: 1.00
This course is designed to teach fundamentals of programmable logic controllers and their programming software. This course will introduce terminology, concepts, print reading and safety.

413-599
Programmable Logic Controllers 2
Credits: 1.00
This is the second of 3 courses for industrial electrician students.

413-600
Programmable Logic Controllers 3
Credits: 1.00
This is the third course of 3 for industrial electrician students. PLC applications and assessment projects are planned.

413-601
Safety and Print Reading
Credits: 0.50
This course will acquaint the student with the interpretation of 'Prints' (blueprints) and other engineering and manufacturing documentation. The primary focus of the course will be on the basics of prints and how they are used to convey information to technicians. Application of electrical prints from industrial settings will be studied.

413-602
AC & DC Motors
Credits: 1.00
This course identifies the components of an AC motor, introduces the student to DC motors, basic components and theory, and discusses split-phase motors and capacitance start motors. Defines and explains AC motor functions, synchronous speed and how to calculate it, the components and functions of various three-phase motors, the components and functions of externally excited motors, starters, and variable speed drives, basic magnetic principles, sine waves, methods of increasing magnetic flux in a conductor, how rotating field is created in an AC motor, torque, and role in motor operation, and the components and functions of externally excited motors, starters, and variable speed drives. Demonstrates the relationship between phased current and roto spin, induction, its effect on a rotor, armature reaction, compensations, and introduced voltage. Trains the student to practice slip and how to calculate it using a formula and distinguish single-phase motors from three-phase motors.

413-603
Solid State Electronics Basics
Credits: 1.00

This course provides the student with the skills and knowledge for troubleshooting basic solid-state devices and circuits. The construction, identifications, and operating characteristics of solid-state devices is investigated. The student builds test circuits, gathers and analyzes data, and follows safety procedures. Methods for locating defective components are applied. The replacement of printed circuit board components is performed. Also examined is the effect of temperature on the operation of solid state devices.

413-604
Variable Speed Drives
Credits: 1.00
This course provides the opportunity for students to learn about power systems and variable speed drives. Topics include electricity, electronics, power transmissions, motor operations, AC and DC motor drives, servo and stepper drives, peripherals and communication. Students will also explore closed loop control, feedback devices, and drive maintenance and the troubleshooting of VSD's.

413-701
Elect. Safety & Print Reading Electrical Safety & Print Reading
Credits: 1.00
This course is designed to provide basic electrical skills to those who need to perform first-line electrical maintenance tasks including the safe isolation, replacement, and testing of a range of common electrical devices (motors, sensors, heating elements, solenoids, etc.) in a safe and effective manner. In addition to basic electrical skills, this course will acquaint the student with the interpretation of 'Prints' (blueprints) and other engineering and manufacturing documentation. The primary focus of the course will be on the basics of prints and how they are used to convey information to technicians. Application of electrical prints from industrial settings will be studied. Importantly, the format of the course is specifically designed so that, when combined with suitable on-site consolidation of training, it will assist the maintenance manager in meeting the legal requirements for employee competence in electrical work.

413-705
Codes for Industrial Electricians
Credits: 2.25

This course introduces the student to the layout and purpose of the National Electric Code. It also strives to teach the student proper methodology to research a code question and correctly interpret what they are reading. Students will research the structure of the National Electric Code and define the requirements of the code that are common to all electrical installations. In addition, students will examine the installation requirements for fire pumps, emergency systems and fire alarms, plan for the installation of overcurrent protection devices and how to select the proper boxes, cabinets, and conduit, the application of grounding, examine Article 250, Article 300 of the NEC and wiring methods, determine sizing requirements for cords and cables for installations common to industrial facilities, the selection of proper conductors and raceways for industrial facilities, the code requirements which provide for the protection of various industrial transformer installations.

419-511
Hydraulic Pumps Apprenticeship
Credits: 0.75
The student will be able to design hydraulic pumps using a variety of pressure and flow control valves.

419-551
Pneumatics Apprentice
Credits: 1.00
Learning is accomplished with lecture and laboratory using hydraulic, pneumatic, and electrical hardware, videotapes, multi-media interactive video, reference books, and computer simulation software.

419-567
Basic Hydraulics Beginning
Credits: 1.00
Students study all the basic components of hydraulics in simple fluid power systems, covering topics such as symbols, flow control valves, pressure control valves, and directional control valves and pumps.

420-317
CNC Machining Operations
Credits: 2.00
This course presents Computer Numerical Control (CNC) concepts and skills. Students learn how to setup and operate CNC machinery. Basic programming, G and M codes, and fundamental features of CNC control panels are introduced. PREREQUISITES: Course 420-330 - Machine Tool I with a Minimum grade of C or TR

420-318
Die Stamping
Credits: 4.00
This course presents concepts and skills used in the construction of progressive dies. Through critical thinking and practical applications, students will construct two progressive pierce and blank dies that will produce the parts for a non-twist clamp. They will make the hardware that turns the stamped pieces into five separate working clamps and perform entry-level machining tasks for employment in the machining industry. PREREQUISITES: Course 420-332 - Machine Tool II with a Minimum grade of C or TR

420-319
Electrical Discharge Machining
Credits: 2.00
This course presents concepts and skills needed to use CNC programming to operate a wire Electrical Discharge Machine (EDM). Students will program a Mitsubishi wire EDM and perform routine maintenance of the machine and part set-up. PREREQUISITES: Course 420-317 - CNC Machining Operations with a minimum grade of C or TR

420-326
GD & T for Die Making
Credits: 1.00
This course presents concepts to interpret more complex prints and tolerancing techniques. Students will examine part dimensions and assemblies and construct stamping dies. PREREQUISITES: Course 420-329 - Industrial Print Interpretation with a minimum grade of C or TR

420-328
Heat Treating Processes
Credits: 2.00
This course explores the properties of industrial metals with a focus on ferrous metals and tool steels. Students will examine a variety of heat treating applications and will perform metal hardness and stress testing.

420-329
Industrial Print Interpretation
Credits: 2.00
This course presents universal techniques for interpreting mechanical and industrial prints. Students learn to visualize parts and assembly through interpretation and sketching activities. Drawing standards, abbreviations, dimensioning rules and sectional views are emphasized. Geometric dimensioning and tolerancing are introduced.

420-330
Machine Tool I
Credits: 4.00
This course introduces the basic concepts and skills needed to operate engine lathes, power saws, drill presses and bench applications. Safe and proper operation of tools and machines is emphasized. Students will operate speeds, feeds, cutting tools, tool geometry, tool grinding and work-holding devices. Dimensional accuracy and finished quality will be emphasized.

420-332
Machine Tool II
Credits: 4.00
This course expands on the basic concepts and skills introduced in Machine Tool I related to engine lathes, power saws, drill presses, bench applications, CNC setup and

operation. Safety and proper operation of tools and machines is emphasized. Speed feeds, cutting tools, tool geometry, tool grinding and work-holding devices are examined. Dimensional accuracy and finished quality are emphasized. COREQUISITES: Course 420-330 - Machine Tool I Take 804-370 - Mathematics I/Applied

420-333
Metallurgy Principles
Credits: 1.00
This course examines the principles concerning the metals used in the industrial world. The production and properties of these materials are presented as well as their application. Students investigate the behavior of ferrous and non ferrous metals with an introduction to steel alloys.

420-334
Precision Measuring and Gauging
Credits: 1.00
This course introduces the student to precision measuring equipment and techniques. Students will measure a wide variety of interior and exterior part features. Advanced equipment such as the dial caliper and outside micrometer will be presented.

420-335
Surface Grinding
Credits: 1.00
This course presents techniques for the precision grinding of various metals. Students perform a variety of complex setups and precise machining. Safety and cleanliness are emphasized. PREREQUISITES: Course 420-330 - Machine Tool I

420-342
CNC Introduction and Support Equipment Basics
Credits: 1.00
This course is designed to give the students a familiarization with the necessary practices and techniques used to operate Computer Numerical Controlled (CNC) machines. Some of the topics covered include CNC machine introduction, safe practices and techniques used to remove burrs, Machinery's Handbook usage, basic

CNC machine operator maintenance, and production support equipment use and operation. COREQUISITES: Take 420-345 - Gauging/Inspection Take 623-147 - Manufacturing Shop Safety

420-343
CNC Machine Tool Operation
Credits: 4.00
This course is actual run time in the lab for hands-on machine operation. Students will work in groups and as individuals to gain experience in machine operation during a production run. Students bring together all of the theories learned in other classes and apply them to the production process.

420-344
CNC Offsets and Operations
Credits: 1.00
In this course, we will cover CNC machine operations. Topics covered include machine homing, tooling used, an understanding of offsets, setting offsets, and the application of offsets in the CNC machine. COREQUISITES: Course 420-345 - Gauging/Inspection

420-345
Gauging/Inspection
Credits: 2.00
Students will learn to apply blueprint specifications, perform shop math calculations, understand geometric dimensions and tolerances, and correctly use many different analog and digital measuring instruments, including various types of micrometers, calipers, stales, gauges (height, plug, thread, and surface roughness), and optical comparators. COREQUISITES: Take 421-376 Take 804-370 - Mathematics I/Applied

420-494
Cost Estimating
Credits: 0.25
This course will provide the learner knowledge of the necessary steps to cost and build the various components used in manufacturing, including dies, mold, fixtures and

gauges. The learner will utilize a hands-on approach to performing cost estimations as if they were in the position of doing so in the real world for a company.

420-495
Grinding, Drilling, & Cut-Off Machine
Credits: 1.00
In this course. the techniques and machines used for surface grinding, hand grinding, and ID+OD grinding will be reviewed. The use of different types of drilling machines and their functions will be presented, including how they benefit the tool and die maker. The importance of cut-off machines including the various types, pros and cons will also be discussed.

420-505
Machine Technology I
Credits: 1.00
Survey different areas of machine technology. Variety of areas covered are: safety, measurement, layout, hand tools, drills, grinding, lathe, milling.

420-506
Basic CAD/CAM
Credits: 1.00
This course is designed for students in the CNC Apprenticeship program to gain basic knowledge of what CAD/CAM is and how it is effective in the CNC manufacturing area. The student will be introduced to various concepts and methods of producing parts and drawings and then uploading them to the CNC machine for machining. The student will learn the basics of drawing a part from a concept or looking at a drawing and implementing the tools in the CAM program.

420-509
CNC Programming and Planning
Credits: 1.00
This course is designed for students in the CNC program to gain knowledge of planning the steps to machine a part and learn how to program the machine using these steps. The student will be given a print and they will need to decide how to hold the part, what features to machine first and second, and why they need to be

machined in this order. Students will also learn about various machines and which one works best with their applications in industry. The student will utilize the CAD/CAM from other courses to help with the programming and planning.

420-510
Industrial Manufacturing Tech. Appr. 1
Credits: 2.75
The first semester of related instruction includes an orientation to the trade and manufacturing, followed by the MSSC safety module, MSSC quality module, OSHA 10 certification, blueprint reading, visual inspection, measurement and first aid and CPR training. Manufacturing concepts will be introduced and applied in a variety of manufacturing settings. MSSC modules 1 and 2 are aligned with the learning plans for this course along with the MATC course Machine Trades Math.

420-512
Industrial Manufacturing Tech. Appr. 2
Credits: 2.75
The second semester of related instruction includes the MSSC manufacturing processes and production and maintenance awareness modules, along with communication, lean manufacturing, problem solving, and frontline leadership. Manufacturing related concepts will be applied to a variety of industrial settings. The course wraps-up with an examination of emerging trends and technologies, and future directions for manufacturing. MSSC learning objectives in modules 3 and 4 are aligned with the learning plans for this course. In addition, the MATC Communication for Apprentices course is included in the learning plans, but will stand alone for registration and transcript purposes.

420-516
Precision Measurement
Credits: 1.00
This course introduces students to the use of various types of precision measurement instruments used in the CNC/Tool & Die manufacturing environment. The students will learn about different types of Micrometers, Calipers, Gage blocks, and Gage pins. The students will be taught how to measure inside the part with telescoping gauges or Bore gauges. The students will also be introduced to SPC. The method of holding light tolerances will be discussed in this course also.

420-517
Cutting Tools
Credits: 0.50
This course will introduce various types of cutting tools used in the Tool & Die/Mold Maker fields. While in the class, the students will learn the basics of drills and taps to the many different types of inserts, cutting edges and angles associated with these cutting tools. We will also discuss the different types of tool holders for these tools and the pros and cons of the different types of holders.

420-518
Machinery Handbook
Credits: 0.25
This course is designed to introduce the students to the Machinery's Handbook. The Machinery's Handbook is an in-depth book of information pertaining to the manufacturing world. We will focus on the Tool & Die/Mold making information found in the book. The students will also focus on various ways to look up information using this book.

420-519
Geometric Dimensioning & Tolerancing
Credits: 0.25
This course is designed to introduce the students to Geometric Dimensioning & Tolerancing (GD&T) systems. We will discuss the 5 different groups and the symbols associated within the GD&T groups. The students will be shown how and why the GD&T symbols are used on a blueprint. While introducing the different symbols for GD&T, the students will be shown how to check or verify the manufactured parts using these various symbols.

420-520
Precision Measurement
Credits: 0.50
This course introduces students to the use of various types of precision measurement instruments used in the CNC/Tool & Die manufacturing environment. The students will learn about different types of Micrometers, Calipers, Gage blocks, and Gage pins. The

students will be taught how to measure inside the part with telescoping gauges or Bore gauges. The students will also be introduced to SPC. The method of holding light tolerances will be discussed in this course also.

420-560
Machine Trades/Mathematics 3
Credits: 1.00

420-561
Machine Trades/Mathematics 4
Credits: 1.00

420-569
Electrical Discharge Machining Apprenticeship
Credits: 1.00
Course is designed to give apprentices a basic understanding of the theory and process of sinker and wire EDM in toolmaking.

420-592
Numerical Control
Credits: 1.00
This course is a basic course as it relates to machine tools. Learning the operation of numerical control and the programming of simple jobs. Designed to introduce numerical control to machine trades apprentices.

420-713
Precision Measurement for Machine Trades
Credits: 1.00
This course is designed to acquaint the apprentice with the measurement systems and tools most frequently used in layout and machining processes. Learning outcomes relate to semi-precision through precision measuring tools and equipment combined with opportunities to investigate new technologies.

420-714
Engineering Drawings for Machine Trades
Credits: 1.00
This course will acquaint the apprentice with the interpretation of engineering prints and other technical and manufacturing documentation. The primary focus of the course will be on the part of manufacturing most closely related to machining and tooling. Background information is provided relative to the process used to create and finish the product or piece part on the prints being examined.

420-719
Grinding Machines for Machine Trades
Credits: 0.50
This course focuses on the terminology, type and operations of grinding machines in the metal-working industry. Apprentices use grinding machines and the attachments and accessories frequently encountered in manufacturing operations that use common grinding processes.

420-720
Cut-Off Machines for Machine Trades
Credits: 0.25
In this course, the apprentice applies basic processes to various types of cutoff machines used in industry, including cutoff machine applications, cutoff machine tooling, and cutoff machine safety.

420-723
Electrical Discharge Machining Tool/Die
Credits: 0.50
This course is designed to give the apprentice a basic understanding of the theory and process of sinker and wire EDM in toolmaking. This course uses the EDM Technical Manual distributed by POCO Graphite, Inc., which contains the most current information available in the industry. This course was formerly module 13 in related instruction. This course alone cannot produce the qualified industrial journey level worker. It is but a component of a complete apprenticeship which, when complemented with competent and effective on-the-job training by a qualified journeyperson can produce a technician capable of dealing with the most industrial work situations.

420-726
Tooling/Workholding for Machine Trades
Credits: 0.50
This course introduces the apprentice to the concepts of workholding design. Apprentices explore the basic elements of tool design and work holding applications.

420-727
Geometric Dimensioning and Tolerancing
Credits: 0.50
This course has the apprentice apply skills to interpret the geometric dimensions and tolerances found on engineering drawings and other industrial documents. Apprentices focus on interpreting symbols, identifying tolerance zones and determining ways to check parts for conformity to the specified geometric controls.

420-728
Stamping Diemaking for Machine Trades
Credits: 1.00
This course introduces the apprentice to the basics of stamping and diemaking. Topics include the basic terminology, blanking, piercing, bending and related basic operations. In addition learners will discover the basics of the theory and background knowledge related to stamping and die making. This course was designed for related instruction for tool and die, stamping die and mold makers.

420-729
Mold Making for Machine Trades
Credits: 1.00
This course introduces the apprentice to the basic mold making process, mold construction and components, and materials. The course provides related instruction for the tool and die, stamping die and mold makers apprenticeship programs.

420-730
Stamping Die Design Apps for MacHines
Credits: 1.00

This course provides the stamping die maker apprentice with the opportunity to design from part specifications two elementary stamping dies. This course provides related instruction for the tool and die, stamping die and mold makers apprenticeship.

420-740
Mathematics for the Machine Trades
Credits: 1.25
This course provides applied mathematics instruction from a review of basic arithmetic. Apprentices will apply basic algebra, geometry and trigonometry to various machining operations and processes.

420-741
Metallurgy & Materials for Machine Trade
Credits: 0.50
This course provides the opportunity for the apprentice to develop the knowledge, skills, process, and understanding of hardness testing and heat treating of various materials.

420-742
Turning Machines for Machine Trades
Credits: 1.00
This course will acquaint the apprentice with the terminology, methods, and operations for turning machines used in the metal-working industry. Apprentices will learn to perform calculations needed to operate turning machines including speed and feed calculations. Apprentices will make calculations necessary to setup a turning machine for screw threads and taper operations.

420-743
Milling Machines for Machine Trades App
Credits: 1.00
This course will have the apprentice analyze the basic principles of vertical and horizontal milling machines. Apprentices practice safety measures while exploring basic parts and functions of the machines, work holding devices, tooling requirements, and feeds and speeds.

420-744
CAD/CAM for Machine Trades Apprentices
Credits: 1.50
This course is designed to provide the apprentice with the concepts and applied techniques used in computer-aided design (CAD) and computer-aided manufacturing (CAM).

420-745
CNC Programming and Operations 1
Credits: 1.00
Apprentices will examine CNC related operations and safety. Course competencies include classifying types of equipment, comparing CNC tooling, setup, and work holding operations and CNC controls.

420-746
CNC Programming and Ops 2
Credits: 2.00
This course is a classroom/lab introduction to CNC programming for apprentices, with a focus on CNC turning and milling centers. Apprentices will create setup sheets, develop tool lists, calculate speeds and feeds, assign tool offsets and write CNC programs.

421-316
Blueprint Reading/Advanced
Credits: 2.00
Review of basic blueprint reading principles. Deals with more forgings, castings and complex prints. New material introduced includes surface textures, fits, auxiliary views, cast iron, pin fasteners, gears, cams, ratchet wheels, and additional GDT coverage. Students read information units, perform mathematical calculations, and answer questions pertaining to part prints. PREREQUISITES: Course 444-337 - Fund of Blueprint and Shop Safety COREQUISITES: Course 801-301 - Writing Principles

421-515
Blueprint Reading I/Metal Trades
Credits: 1.00
This course covers the basic principles necessary for training in the interpretation of blueprints and free hand drawings of machine parts.

421-516
Blueprint Reading 2/Machine Trades
Credits: 1.00
This course teaches students proficiency in the interpretation of blueprints which illustrate job procedure tactics and their relation to drafting. Special attention is given to drawings which represent common machine processes.

423-501
Equipment Installation
Credits: 0.75
Students will layout equipment installations, plan for moving equipment, and set and level equipment.

423-502
Mechanical Power Transmission
Credits: 0.75
Course examines drive transmission systems and their applications, including roller chains. Students will develop skills inspecting power transmission systems and troubleshooting mechanical drive systems.

423-503
Packings, Seals, Gaskets
Credits: 0.50
Students will examine packing, seals, and gaskets and compare materials and applications. Then skills in layout, cutting, inspecting, removing, and installing these components will be developed.

423-504
Pipefitting and Valves
Credits: 0.75
Course introduces students to pipe sizes, materials and schedules, examines fittings, tubing and valves, and develops skills related to layout, installation, and maintenance.

423-506
Sheet Metal & Structural Steel Fab
Credits: 0.75
Course compares types of sheet metal and tools used by the trade. Students will develop skills related to fabricating sheet metal and structural steel and then erecting structural steel.

423-507
Vacuum Systems
Credits: 0.75
Course introduces principles of vacuum systems and interpreting vacuum system schematics. Students will then develop skills related to installing, repairing, replacing and applying troubleshooting principles to vacuum systems and components. Course examines preventative maintenance techniques commonly used on the job.

423-508
Fasteners
Credits: 0.25
Course provides students with a chance to compare fasteners and their uses, analyze fastener failures, and install mechanical fasteners.

423-565
Principles of Rigging
Credits: 0.50
Learning is accomplished by using a combination of lecture and practical lab assignments. The basic principles of safe rigging will be explored.

423-716
Metallurgy
Credits: 1.00
This course develops skills regarding metallurgical concepts. Students will compare various metals and their applications, apply metallurgical techniques to work processes, test metals for hardness, and examine heat treating applications.

423-724
Preventative & Predictive Maintenance
Credits: 1.00
Course examines both preventative and predictive maintenance concepts as they apply to millwright work processes and machine maintenance. Students will develop skills related to assessing machine conditions and faults based on both preventative and predictive maintenance.

423-730
Bearings
Credits: 0.75
Students will examine bearing types and applications, and compare equipment bearings. Learners will develop skills related to bearing inspection, selection, removal, mounting, lubrication and diagnosing bearing failures.

423-731
Couplings & Alignment
Credits: 1.00
Course compares different coupling types and examines common misalignment problems. Learners will develop skills related to inspecting, troubleshooting, and preparing couplings for removal and installation, and also aligning and lubricating couplings.

427-401
Plumbing Applications
Credits: 0.90
Examines a variety of real-life applications used in the plumbing trades and typically covered in paid related instruction. The units address the how's and whys behind joints

and connections, rigging and signaling, hydraulics and pneumatics, plumbing and the environment, gas pipe applications, and applied electricity for plumbers.

427-500
Plumbing I/Related
Credits: 2.00

427-501
Plumbing II/Related
Credits: 2.00

427-502
Plumbing III/Related
Credits: 2.00

427-503
Plumbing IV/Related
Credits: 2.00

427-504
Plumbing V/Related
Credits: 2.00

427-505
Plumbing VI/Related
Credits: 2.00

427-515
Plumbing Fundamentals Apprenticeship
Credits: 1.00

Students will learn the basic fundamental practices and techniques of the plumbing trade with an emphasis on safety throughout the course. Learning will be accomplished through a combination of class discussion and practical exercises.

427-578
Green Plumbing Applications
Credits: 2.00
This course provides plumbing apprentices with an introduction to green applications. Apprentices will be instructed on how to identify, install and maintain a variety of green products and systems. They will apply the Wisconsin Plumbing Code to various installations. This introduction will give an apprentice the basic knowledge to study for a variety of green certifications.

427-579
Plumbing Advanced Topics
Credits: 2.00
Plumbing Apprentices will be required to interpret building plans and specifications, and apply code requirements to site plans, floor plans, and isometric drawings of DWV, water, POWTS, and stormwater systems.

427-751
Sanitary Drains 1
Credits: 2.00
Plumbing related instruction of sanitary drain systems. Course includes a review of codes and trade practices related to sanitary drains, drainage systems, components and applications.

427-752
Vents and Venting Systems
Credits: 2.00
This course is designed to provide the apprentice with the skills to identify and design sanitary vent piping in a plumbing system in accordance with the Wisconsin Plumbing

Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

427-753
Water Distribution 1
Credits: 2.00
This course provides the apprentice with the skills to identify, design, install and service various applications for water supply systems that are listed in plumbing codes. Apprentices will use the code language and tables in various plumbing systems in accordance with the Wisconsin Plumbing Code. Course topics will include commercial to single family and private well pump systems. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

427-754
Water Distribution 2
Credits: 2.00
This course provides the apprentice with the skills to identify, design, install and service cross connection controls, water treatment equipment and multi-purpose piping systems in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

427-755
Sanitary Drains 2
Credits: 2.00
This course provides the apprentice with the skills to identify, design, install and service various applications for storm water, clear water, and drainage systems. Apprentices will use the code language and tables in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

427-756
Private Onsite Wastewater Treatment Sys
Credits: 2.00
This course provides the apprentice with the skills to identify, design, install and service various applications for private onsite wastewater treatment systems that are listed in plumbing codes or individual component manuals. Apprentices will use the code language and tables in various plumbing systems in accordance with the Wisconsin Plumbing Code. Other topics will include pretreatment, soil evaluation, site planning and new technologies. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations.

427-757
Green Plumbing Applications
Credits: 2.00
This course provides plumbing apprentices with an introduction to green applications. Apprentices will be instructed on how to identify, install and maintain a variety of green products and systems. They will apply the Wisconsin Plumbing Code to various installations. This introduction will give an apprentice the basic knowledge to study for a variety of green certifications.

427-758
Plumbing Advanced Topics /TSA
Credits: 2.00
This course provides the apprentice with the opportunity to select and complete an applied plumbing project in collaboration with the instructor. Projects will apply the skills required to identify, design, install and service various plumbing applications that are listed in plumbing codes. Apprentices will use the code language and tables in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course builds upon the theory, work experience, and the application of plumbing code principles addressed in previous coursework to support completing an applied hands-on project.

439-300
Basic CAD and Basic Toolroom CAM
Credits: 2.00

This course is designed to introduce the student to Basic CAD (Computer Aided Design) / Basic CAM (Computer Aided Machining) practices used in the tool room. The student will complete a machined part from the beginning to the end using the CAD/CAM software. Each student will draw a part using CAD software, the student will then assign the necessary tools needed to machine the part, and program the tools to machine part. The students will then run the part through a simulator and prove out their program. Once the part is proven they will then download the program to a tool room machine and produce the part safely and correct. COREQUISITES: Course 804-370 - Mathematics I/Applied

439-301
Tool Room Theory
Credits: 1.00
The Tool Room Theory course will cover topics such as Die Stamping, Jig and Fixtures, Mold Making and advanced tooling techniques. The students will gain knowledge in each of these topics through various class discussions and hands on displays. This course will also cover various types of cutting tools and their purpose on the machining floor.

439-505
Stamping and Die Design Applications
Credits: 1.00
This course presents concepts and skills used in the construction of various types of stamping and forming dies. Students will learn how stamping dies work and what parts make-up the design.

439-506
Mold Die Design Applications
Credits: 1.00
Students will research design applications and the construction of various types of molds used in industry today. Instruction will include how molds work and what parts make-up the mold design.

439-507
Milling/Turning 1
Credits: 1.00
This course introduces the basic and minor advanced Milling and Turning used in industry today. Safe and proper operation of tools and machines is emphasized. Students will learn speeds and feeds and use various types of tools used on the lathe and mill.

439-508
Milling and Turning II
Credits: 1.00
This course is designed for students in the CNC Apprentice program to gain advanced knowledge of the support machines used in the tool room and CNC manufacturing environments. This is an advanced class and uses advanced techniques from the Milling and Turning I course. Students will make advanced parts and fixtures for the CNC machines. Machine processes used in this class will help support CNC machining methods.

439-530
Die Making/Apprentice
Credits: 1.00
This course presents advanced concepts and skills used in the construction of various types of stamping and forming dies. Students will learn how these dies work and what parts make up the die design.

439-535
Jig and Fixture Design
Credits: 1.00
This course explores the basic types and functions of jigs and Fixtures, design economics. Design and construction of jigs, fixtures, and specialized workholding topics.

442-101
Welding Basics
Credits: 1.00

This lab course covers the fundamentals of welding. Welding, soldering, brazing, and fabrication of various metals are included.

442-102
Introduction to Welding
Credits: 2.00
This course provides theory and practical experience for arc and gas welding techniques. An emphasis is placed on basic safety, equipment usage, and proper procedures. The welding of ferrous and non-ferrous metals will be explored.

442-303
Welding/Basics of Robotic Welding
Credits: 3.00
This course provides instruction in basic welding robot operation including powering up, homing procedures, powering down, and proper work angles for all welding processes. The student will also learn the importance of proper travel speeds and welding equipment set up to ensure quality welds when programming robots. A heavy emphasis on robotic cell safety is also included in this course COREQUISITES: Complete course 442-321 - Welding/Gas Metal Arc Welding

442-304
Welding/Robotic Advanced GMAW
Credits: 3.00
This course builds on the principles taught in both GMAW courses and the Basics of Robotic Welding course and how to integrate those principles to achieve industry-ready robotic programming and welding skills. This course reinforces the importance of safety when working in a robotic welding environment and focuses on all aspects of safely operating and basic consumable replacement and repair. This course also covers fixture and jig building to help create an atmosphere for repeatable weldments for production parts runs.

442-305
Welding/Robotic Advanced GTAW
Credits: 3.00

This course reinforces the principles taught in the hands-on GTAW courses along with the Basics of Robotic Welding course and describes how to integrate those principles to achieve industry-ready robotic programming/welding skills. There is a heavy emphasis on the importance of balancing safety and efficiency in a robotic welding environment. An extensive focus on fixture and jig building design will be incorporated. Students will build their own fixtures to demonstrate the ability to produce production parts with a robot.

442-306
Pipe Gas Metal Arc Welding
Credits: 3.00
This course builds on the principles taught in the GMAW classes and provides instruction on the skills necessary for the pipe welding industry. The fundamentals of pipe fit-up, preparation, tacking, and electrode selection for both ASME and API standards. Students will perform open butt GMAW root and fillers with ER70S-2 in 2G, 5G and 6G positions. The course will focus on safely performing work and the necessary qualifications required for the pipe welding environment. COREQUISITES: Complete course 442-321 - Welding/Gas Metal Arc Welding

442-307
Welding/Pipe Gas Tungsten Arc Welding
Credits: 3.00
This course builds on the principles taught in the GTAW classes and provides instruction on the skills necessary for the pipe welding industry. The fundamentals of pipe fit-up, preparation, tacking, and electrode selection for both ASME and API standards. Students will perform open butt GTAW root and fillers with ER70S in 2G, 5G and 6G positions. Welding on aluminum, stainless, and other alloy pipes will also be performed. The course will focus on safely performing work and the necessary qualifications required for the pipe welding environment. PREREQUISITES: Take 442-322 - Welding/Shielded Metal Arc Welding Take 442-323 - Welding/Gas Tungsten Arc Welding

442-308
Welding/Pipe Shielded Metal Arc Welding
Credits: 3.00

This course builds on the principles taught in the SMAW classes and provides instruction on the skills necessary for the pipe welding industry. The fundamentals of pipe fit-up, preparation, tacking, and electrode selection for both ASME and API standards will be covered. Students will perform open butt SMAW welding with E6010, E7018 electrodes in 2G, 5G and 6G positions. The course will focus on safely performing work and the necessary qualifications required for the pipe welding environment. COREQUISITES: Complete course 442-322 - Welding/Shielded Metal Arc Welding

442-314
Welding/Fundamentals of
Credits: 2.00
This course covers the four main welding processes of gas metal ARC (mig wire) shielded metal arc (stick) gas tungsten arc (tig, heliarc) and oxyacetylene weld, cut and braze. Ideal course for beginners, home welders or apprentices.

442-316
Structural Shielded Metal Arc Welding
Credits: 3.00
In this course, students explore skills required for the structural welding industry. They examine large plate fit-up, preparation, and electrode selection for AWS Welding Code for Structural Steel, and they practice SMAW welds in all welding positions. Upon completion of the course, students will be able to safely perform welds in the structural welding environment. PREREQUISITES: Take 442-322 - Welding/Shielded Metal Arc Welding; Minimum Grade C Take 442-330 - Welding/Advanced Shielded Metal Arc Welding; Minimum Grade C

442-317
Structural Flux Cored Arc Welding
Credits: 3.00
In this course, students explore skills required for the structural welding industry. They examine large plate fit-up, preparation, and electrode selection for AWS Welding Code for Structural Steel, and they practice FCAW-G and FCAW-S welds in all welding positions. Upon completion of the course, students will be able to safely perform welds in the structural welding environment. PREREQUISITES: Take 442-321 - Welding/Gas

Metal Arc Welding; Minimum Grade C Take 442-332 - Welding/Advanced Gas Metal Arc Welding; Minimum Grade C

442-318
Structural Gas Metal Arc Welding
Credits: 3.00
In this course, students explore skills required for the structural welding industry. They examine large plate fit-up, preparation, and electrode selection for AWS Welding Code for Structural Steel, and they practice GMAW Spray Transfer welds using ER70S-6 in common welding positions. Upon completion of the course, students will be able to safely perform welds in the structural welding environment. PREREQUISITES: Take 442-321 - Welding/Gas Metal Arc Welding; Minimum Grade C Take 442-332 - Welding/Advanced Gas Metal Arc Welding; Minimum Grade C

442-321
Welding/Gas Metal Arc Welding
Credits: 3.00
(GMAW; MIG; Short-Arc; Wire. Instructs in basic safety, equipment usages and procedures with various filler metal in four basic welding positions. Instruction in plasma arc cutting of various metals. Provides considerable hands-on experience as well as technical information.

442-322
Welding/Shielded Metal Arc Welding
Credits: 3.00
(SMAW,Stick,Stick-Arc) Instructs basic safety, equipment usages and procedures with five basic welding electrodes in four basic welding positions. Provides considerable hands-on experience as well as technical information. Allows for simulated structural steel welding certification opportunity.

442-323
Welding/Gas Tungsten Arc Welding
Credits: 3.00
(GTAW, TIG, Heli-Arc, Tungsten) Instructs basic safety, equipment usages and procedures with various filler rods in three basic welding positions. Provides considerable hands-on experience as well as technical information.

442-324
Weld Printreading and Fabrication Procedures
Credits: 2.00
Instructs in basic graphic communication relating to the welding field. Provides for hands-on application of fabrication from blueprints. Follows American Welding Society welding symbol format.

442-330
Welding/Advanced Shielded Metal Arc Welding
Credits: 3.00
Provides advanced welding applications in SMAW welding with small (3/23 inch) and large (5/32 inch) electrodes hardface, aluminum, structural and pipe applications. PREREQUISITES: Course 442-322 - Welding/Shielded Metal Arc Welding

442-332
Welding/Advanced Gas Metal Arc Welding
Credits: 3.00
Provide advanced welding applications in GMAW welding using various sizes and types of electrodes of hard and soft wires on structural applications. Includes Gateway Technical College flux cored weld certification. PREREQUISITES: Course 442-321 - Welding/Gas Metal Arc Welding

442-333
Welding/Advanced Gas Tungsten Arc Weld
Credits: 3.00
Provides advanced welding applications in GTAW welding using stainless steel, aluminum and mild steel. Includes Gateway Technical College aluminum tensile

certification and steel plate certification. PREREQUISITES: Course 442-323 - Welding/Gas Tungsten Arc Welding

442-334
Welding/Thermal Cutting
Credits: 3.00
(O-A; Gas) Instructs basic safety, equipment usage and procedures with steel and braze filler rods in the four basic welding positions. Instructs in O-A cutting; providing considerable hands-on experience as well as technical information.

442-510
Welding Fundamentals (apprentices)
Credits: 1.00
In this course, students explore basic welding processes. They examine safe work practices and welding machine operation. Students practice a variety of welds. Upon successful completion of the course, students will be able to safely perform basic welds.

443-101
Forklift Operation and Maintenance
Credits: 1.00
This course is intended to prevent accidents, injuries, and fatalities that may be caused by the improper and unsafe use of forklifts. The course will cover pre-operation, operation, and load handling by means of presentations and hands-on training. Course participants will earn certification after passing a driving test on a forklift. COREQUISITES: This course is part of a priority placement program and registration is limited to program students with Core-Active status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

443-310
Fundamentals of Construction
Credits: 1.00
In this course, students apply safe operating procedures to their use of hand tools and power tools for construction tasks. They interpret construction drawings, perform basic construction calculations, and practice using test instruments to gather data on length, volume, area, depth, and dimensions. Upon successful completion of the course, students will be able to safely complete basic construction tasks using hand tools and power tools. COREQUISITES: This course is part of a priority placement program and registration is limited to program students with Core-Active status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

443-311
Electrical Applications
Credits: 3.00
This course introduces the student to the basics of building electrical maintenance. Repair and replacement of 110 and 220 volt electrical components are emphasized. PREREQUISITES: Complete course 605-107 or 601-304 - Electricity and Electronics for HVAC or 401-304 - Electricity and Electronics for HVAC COREQUISITES: Complete course 601-111 or 443-310 - Fundamentals of Construction

443-312
Carpentry and Repair, Basic
Credits: 2.00
Basic construction methods and building materials are discussed. Students develop the knowledge and skills to perform a wide range of building maintenance activities. COREQUISITES: Complete course 601-111 or 443-310 - Fundamentals of Construction This course is part of a priority placement program and registration is limited to program students with Core-Active status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

443-313
Interior Finishing
Credits: 2.00
This course will introduce the student to the basics of building interior finishing. Dry walling, painting, wall papering, and preventative maintenance will be emphasized. PREREQUISITES: Course 804-370 - Mathematics I/Applied minimum grade C or TR COREQUISITES: Complete course 601-111 or 443-310 - Fundamentals of Construction

443-314
Mechanical Systems
Credits: 2.00
The knowledge and skills required to perform basic plumbing installations and repairs are covered. COREQUISITES: Complete course 601-111 or 443-310 - Fundamentals of Construction

443-315
Industrial Preventative Maintenance
Credits: 2.00
This course will cover the basics of industrial preventative maintenance equipment, scheduling, and repair that will be covered in lecture and lab. COREQUISITES: Complete course 443-310 - Fundamentals of Construction or 601-111

444-306
Swiss CNC Setup and Operation
Credits: 3.00
This course will further expose students to the setup of CNC Swiss Style Lathes, tooling, and the bar feeder. The student will set up and operate CNC Swiss-Style Lathes. Parts will be machined from selected programs. This course will also require students to write and produce programs for CNC Swiss Style Lathes. The student will also produce projects on the CNC Swiss Style Lathes using these programs. Setup and cycle reduction time will also be covered.

444-307
Fundamentals of Swiss CNC Turning
Credits: 3.00
This course demonstrates the similarities and differences between conventional and Swiss turning processes. This course will also review the bar feeder, main collect, guide bushing, gang slide tools and live tool options. Controller orientation and basic programming with the discussion and demonstration of basic swiss-specific G codes will be covered. Machine operation and processes will be the main focus of this course. This course will review the characteristics of hazardous wastes and its safe handling, storage and disposal.

444-308
Fundamentals of Live Tooling
Credits: 3.00
This course is acutely aligned to provide the specific skills required to efficiently and effectively operate machines employing the 4 axis part processing to maximize machine productivity. This course covers concepts of CNC machining, set-up and operations, tooling and work-holding systems, and basics of manual part programming for drilling, milling, tapping, as well as boring operations by utilizing G codes. Hands-on practice is an integral part of the class.

444-309
Live Tooling Setup and Operation
Credits: 3.00
The course is aligned to providing the knowledge and skills required to 'translate' the part drawing into a finished product. Part programs will be created with a consistent focus on identifying those specific part features that readily lend themselves to 4 axis structured programming, and simultaneous machining. The individual will be capable of defining the list of required processes, their optimum sequential order, create the complete CNC part program, install the appropriate tools correctly, establish the program zero points, perform corresponding tool offsets, and related machine safety procedures.

444-311
CNC Lathe Process
Credits: 3.00

This course is designed to provide the knowledge and skills required to create a CNC program that will convert stock material into a finished product. The student will be capable of defining the list of required processes, their optimum sequence, create the complete CNC part program, install the appropriate tools correctly, establish the program zero point, and perform corresponding tool offsets. This course is also an advanced, hands-on study of Computer Aided Design/Computer Aided Manufacturing theory and applications using CAD/CAM software. Emphasis is placed on generating programs using advanced modeling techniques for the CNC Lathe at an intermediate level under moderate instructor supervision. The course is structured to include classroom instructional theory and hands-on operation of a CNC Turning Center. PREREQUISITES: Courses 444-335 - CNC Lathe Set-Up minimum grade C or TR

444-314
CNC Mill Process
Credits: 3.00
This course is designed to provide the knowledge and skills required to create a CNC program that will convert stock material into a finished product on a Vertical Machining Center. The students will be capable of defining the list of required processes, their logical / optimum sequence, create the complete CNC part program, install the appropriate tools correctly, establish the program zero point, and perform corresponding tool offsets. This course is also an advanced hands-on study of Computer Aided Design/Computer Aided Manufacturing theory and applications using CAD/CAM software. Emphasis is placed on generating programs using advanced modeling techniques for the CNC Mill at an intermediate level under moderate instructor supervision. The course is structured to include classroom instructional theory and hands-on operation of a CNC Vertical Machining Center. PREREQUISITES: Course 444-336 - CNC Mill Set-Up minimum grade C or TR

444-315
Intro to Coordinate Measuring Machine
Credits: 1.00
In this course, students use a coordinate measuring machine (CMM) to measure the geometric characteristics of physical objects. Students measure work piece sizes including diameters, lengths, and distances as well as common features such as planes, lines, points, and cylinders. Students interpret geometric dimensioning and tolerancing (GD & T). Using Calypso Software on a Zeiss CMM, students examine how CMM programs are written and executed. Upon completion of the course, students will

be able to perform initial machine start up including probe calibration as well as perform alignments, measurements, dimensioning and manual operation.

444-316
Foundations of CNC Machining
Credits: 3.00
In this course, students investigate the operation of Computer NumericalControlled (CNC) machines. They explore CNC Machining as subtractive manufacturing technology and analyze its methods of safe operation. Students examine the purpose of offsets and their calculation, application, and storage. They identify appropriate machine tools and cutting tools for various production processes. Using a hands-on approach in the lab, students relate the removal of material from a solid block to produce a component per specifications outlined on a mechanical drawing or CAD model. Upon completion of the course, students will be able to apply the concepts presented to the operation of a CNC machine.

444-331
CNC Machining Technology
Credits: 3.00
This course provides an introduction to CNC machining processes and the technology that supports them. Some of the processes covered are spot drilling, drilling, reaming, tapping, counterboring, countersinking, defining and calculating speed and feed rates, screw thread identification, and drill sharpening. Students will perform these processes on manual equipment prior to observing them on CNC equipment. Basic computer skills are also covered in this course.

444-333
Fundamentals of CNC Turning Applications
Credits: 3.00
This course provides an introduction to CNC turning processes and their proper application. Some of the topics covered include lathe set-up and operation, lathe safety, types of lathes, lathe workholding devices, lathe cutting tools, grinding and sharpening of lathe cutters, and a review of lathe machining speeds and feeds. In this course, you will perform O.D. and I.D. turning operations on engine lathes as well as facing, drilling, reaming, tapping, grooving, chamfering, boring, knurling, tapering, and

thread cutting operations. PREREQUISITES: Course 444-331 - CNC Machining Technology

444-334
Fundamentals of CNC Milling Applications
Credits: 3.00
This course provides an introduction to CNC milling processes and their proper application. Some of the topics covered include machine set-up and operation, machine safety, types of milling machines, use and care of various cutting tools, and a review of milling speeds and feeds. The student will perform face and end milling operations as well as drilling, reaming, tapping, and slotting operations on manual milling machines. The proper use and care of accessories, such as edge finders, digital readouts, dial indicators, and boring heads, and an introduction to a Computer Numerical Control milling machine is also covered.

444-335
CNC Lathe Set-Up
Credits: 3.00
Students will produce and troubleshoot CNC lathe set-ups from job packets and machine parts to blueprint specifications. Students will learn simple G and M codes, download programs to machines, graphically verify programs, and prove out parts on a 2-axis turning center utilizing various CNC controllers. Set-ups will include faceting, turning, drilling, grooving, and thread operations. Students will also learn to produce some simple tooling necessary to complete various set-ups.

444-336
CNC Mill Set-Up
Credits: 3.00
Students will produce and troubleshoot CNC mill set-ups from job packets and machine parts to blueprint specifications. Students will learn simple G and M codes, download programs to machines, graphically verify programs, and prove out parts on 3-axis machining centers using various CNC controllers. Set-ups will include face, end, and profile milling and drilling, slotting, boring, and tapping operations. Students will also learn to produce some simple tooling necessary to complete various set-ups.

444-337
Fund of Blueprint and Shop Safety
Credits: 3.00
In this course, students examine mechanical print-reading and shop safety. They practice reading and interpreting symbols, tolerances, and notes found on mechanical drawings. Students practice visualizing and interpreting various mechanical print views and projections. They explore safety practices and related safety documentation in the machining environment, the use of personal protective equipment, and identify unsafe work practices. Upon completion of the course, students will be prepared to earn industry certifications.

444-338
Fundamentals of CNC Machine Application
Credits: 4.00
This course is designed to give students a familiarization with the necessary practices and techniques used to operate Computer Numerical Controlled (CNC) machines. Some of the topics covered include CNC machine introduction, safe practices and techniques used to remove burrs, basic CNC machine operator maintenance, and production support equipment use and operation. Topics such as machine homing, tooling used, an understanding of offsets, setting offsets, and the application of offsets in the CNC machine will also be covered. Actual run time in the lab will be provided for hands on machine operation. Students will work in groups and as individuals to gain experience in machine operation during a production run, applying theories learned to the production process. COREQUISITES: Course 444-337 - Fund of Blueprint and Shop Safety

444-339
Gauging and Quality Control
Credits: 3.00
This course introduces the methods and applications of Statistical Process Control (SPC) used in manufacturing operations. Emphasis will be placed upon the concepts of central tendency, variation and normal distribution of data. The development, application, and interpretation of variable and attribute control charts will be the main focus of this course. Students will also learn to apply blueprint specifications, perform shop math calculations, understand geometric dimensions and tolerances, and

correctly use different analog and digital measuring instruments, including various types of micrometers, calipers, scales, gauges (height, plug, thread, and surface roughness), and optical comparators.

444-340
Gauging & Quality Control Bridge
Credits: 1.00
In this course, students participate in a transitional learning experience intended to bridge their knowledge and skill from course 31-444-339 to course 10-664-116. They practice using a variety of analog and digital measuring instruments including micrometers, calipers, scales, gauges, and optical comparators. Upon completion of the class students will have the knowledge and skill required to perform precision measurements in industry.

457-309
Metal Fabrication I
Credits: 2.00
This course provides instruction in basic fabrication techniques, tool identification, tool usage, and layout principles while preparing the student with a good foundation in fabrication. Students will build a series of projects based upon the techniques and tooling introduced. This course emphasizes the use of hands-on application-based learning to create a good foundation of understanding for seamless transition into Metal Fabrication II.

457-336
Metal Fabrication II
Credits: 3.00
This course presents layout application, blueprint and weld symbol interpretation, welding, fabrication, equipment set ups, and operation skills to safely complete metal fabrications. Selection of fabrication equipment and its safe operation is emphasized. Tools and techniques used in metal fabrication are introduced and students practice their use. PREREQUISITES: Take 442-309 OR 457-309 - Metal Fabrication I Take 442-322 - Welding/Shielded Metal Arc Welding OR 442-323 - Welding/Gas Tungsten Arc Welding Take 442-324 - Weld Printreading and Fabrication Procedures Take 442-321 - Welding/Gas Metal Arc Welding

457-337
Metal Fabrication III
Credits: 3.00
This course provides instruction in advanced fabrication techniques in fixture and jig building, advanced pattern/buck design and construction, and an opportunity for a capstone group project. Students will be responsible for making a fixture and/or jig based on their design and then create multiple parts to ensure repeatability of the part. This course will be extensively hands-on and application-based. PREREQUISITES: Complete course 804-370 - Mathematics I/Applied COREQUISITES: Complete course 457-336 - Metal Fabrication II

458-301
CDL & Inspection Law and Logistics
Credits: 3.00
In this course, students examine laws related to the commercial driver's license (CDL) and the operation of a commercial motor vehicle (CMV). Through simulation and hands-on learning experiences, students explore vehicle systems, inspect and operate a CMV safely, and investigate the operations of a tractor semi-trailer. By the completion of the course, students must obtain a CDL instruction permit. PREREQUISITES: Students must be accepted to program 30-458-1, Truck Driving, to be eligible to register for this course.

458-302
CDL License, Driving Skills, Safety
Credits: 4.00
In this course, students practice driving skills in anticipation of obtaining a commercial driver's license (CDL). Students enhance their skills by driving in a variety of situations and environments they will encounter as a professional driver. They investigate topics related to trip planning, loading procedures, weight distribution techniques, and security issues. Upon completion of the course, students will be able to properly inspect and safely operate a commercial motor vehicle (CMV) in controlled settings. PREREQUISITES: Take 1 group; Take 458-301 - CDL & Inspection Law and Logistics; Minimum grade B-; Take 458-301 - CDL & Inspection Law and Logistics; From rule TRANGEB-;

458-303
Continuous Improvement & Hazard Safety
Credits: 3.00
In this course, students improve their operating skills required for the day-to-day demands of the career. Students examine the truck driver's role as a professional. Students apply transportation rules and regulations as they relate to safety, special rigs, and hazardous material. Students must obtain a commercial driver's license (CDL) to successfully complete the course. PREREQUISITES: Complete course 458-302 - CDL License, Driving Skills, Safety with a minimum grade of B-;

461-120
Small Power Equipment
Credits: 3.00
Structure and theory of the two and four cycle engines. Troubleshooting, storage, maintenance, and repair of the small gas engine are included. Safety of the operator is stressed along with the use and study of operator's manuals for small power equipment. PREREQUISITES: This course is part of a priority placement program and registration is limited to program students with Core-Active status, new program students with priority placement authorization, and students in non priority placement programs that also require this class. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

462-503
Industrial Mechanic Fundamentals I
Credits: 1.00
The application and safe operation of hand and power tools will be explored in this course. The care and use of precision measuring tools and their application will also be covered.

462-504
Industrial Mechanic Fundamentals II
Credits: 1.00
Manual machine operation will be explored in this course. Practical tasks and assignments will be performed on the drill press, lathe, and milling machine.

462-515
Basics of Machine Leveling and Geometry
Credits: 1.00
Learning is accomplished by using a combination of lecture and practical lab work. The basic principles of machine leveling and geometry will be explored.

469-311
Equipment Operations Introduction
Credits: 2.00
This class submerses the student into the job tasks required by a utility worker on an active site. The students will apply their knowledge of site safety and perform the various tasks required by the utility laborer, equipment-operator and crew lead. Students will operate under supervision back hoes, trenchers, directional drills, piercing tools and air compressors in field activities. Proper backing, loading and unloading of trailered loads will also be covered. COREQUISITES: Complete course 469-302

469-312
Field Operations
Credits: 3.00
This field activities class requires students to perform complex field tasks such as pipe location; pipe burial; installation and repair of main, branch or service runs; trench compaction and utility covering while being supervised. Also included will be exercises in meter and regulator setting, leak testing and piping integrity using both common hand and powered machinery. PREREQUISITES: Take 804-370 - Mathematics I/Applied Take 469-302

469-313
Gas Utility Tool Fundamentals
Credits: 1.00

This course immerses the student in basic tool usage designed around the gas utility trades. The learners will learn proper tool identification, proper names of these tools, and proper usage of these tools to ensure a safe and efficient work site.

469-314
Plastic Piping
Credits: 3.00
This course covers the history of polyethylene (PE) piping in the gas industry and the proper handling, storage and uses of PE pipe. The students will learn the fusion processes common to the industry: such as butt, socket and the use of saddles. The students will also learn the techniques used in the electrofusion process. The students will learn to identify proper joining processes, construct various industry connections that can withstand pressure testing and when cut apart for inspection will pass various test standards. Mechanical stab fittings for pipe connection will also be covered.

475-300
Building Construction, Introduction to
Credits: 3.00
This course presents the varieties, identification, characteristics and uses of wood in the construction industry. Material measurement is introduced. Common fasteners, nails, screws and staples and their appropriate use are examined. Principles of construction safety are discussed and safe operation of power tools is demonstrated.

475-302
Residential Print Reading
Credits: 2.00
This course presents the symbols, notations, abbreviations, and conventions that are the architectural language, and acquaints the student with the basic concepts on which residential construction drawings are read and interpreted.

475-303
Framing Techniques I
Credits: 3.00

This course presents frame construction techniques related to floor systems and staircases. COREQUISITES: Take 607-141 - Construction Basics OR 475-300 - Building Construction, Introduction to

475-304
Commercial Print Reading
Credits: 1.00
This course is designed to provide print reading experience in commercial construction. Students will review concepts regarding elements commonly found on prints of commercial structures. Included are types of construction, sitework, structural steel construction, reinforced concrete construction and finish construction. PREREQUISITES: Course 475-302 - Residential Print Reading

475-305
Framing Techniques II
Credits: 3.00
This course presents wall layout and framing, rough-opening calculations and layouts for windows and doors. The principles of roof framing including architectural drafting of plan and elevation views for roofs are examined. Principles of layout and cutting of all roof framing members for both equal and unequal pitch roofs are presented. The Wisconsin Uniform Dwelling Code is explored in relation to wall and roof construction. PREREQUISITES: Take 475-303 - Framing Techniques I COREQUISITES: Take 804-370 - Mathematics I/Applied

475-306
Exterior Trim
Credits: 3.00
This course presents the skills and theory related to roof cornice detail, roof coverings, windows, skylights, doors, and decks. Exterior finish methods are explored. PREREQUISITES: Take 607-141 - Construction Basics OR 475-300 - Building Construction, Introduction to

475-308
Fundamentals of Wood Construction
Credits: 3.00
In this course, learners explore the fundamentals of wood construction. They determine elevations, examine fasteners, and practice using hand and power tools safely. Upon completion of the course, learners will be able to explain the type and purpose of fasteners and use tools safely for their intended purpose.

475-309
Fundamentals of Concrete
Credits: 3.00
In this course, learners explore the physical properties of concrete. They practice laying out concrete walls and footings. They explore curing methods and materials, and they analyze reinforcement methods and materials. Upon completion of the course, learners will be able to layout footings and wall foundations and set up concrete forms for a house foundation. PREREQUISITES: Take 607-141 - Construction Basics OR 475-300 - Building Construction, Introduction to

475-310
Interior Finish Trim
Credits: 3.00
In this course, learners explore interior trim. They install doors, trim work, counters, and countertops. Learners explore the construction of cabinets and countertops. Upon successful completion of this course, learners will be able to install interior trim. PREREQUISITES: Take 607-141 - Construction Basics OR 475-300 - Building Construction, Introduction to

475-311
Interior Coverings
Credits: 3.00
In this course, learners explore interior coverings. They construct interior stairs, install floor finishing, install ceiling tiles, install drywall and install handrails. Upon successful completion of this course, learners will be able to install interior coverings. PREREQUISITES: Take 607-141 - Construction Basics OR 475-300 - Building Construction, Introduction to

475-312
Residential Cabinetry
Credits: 2.00
In this course, students construct residential cabinets. They demonstrate proper shop operations and safety techniques.Students investigate various materials and joints needed for cabinet production. Upon completion of the course, students will be able to build a residential cabinet.

483-178
Geological Formations for Drillers
Credits: 3.00
This course introduces the student to the complex field of geology as it relates to borehole construction. The types of consolidated and unconsolidated formations, the regional occurrence, the most efficient drilling process for each as well as basic rock identification and sample classification for logging purposes are covered. Sources of possible contamination and the protection of subsurface groundwater from the drilling process or surface contaminates are covered.

483-180
Rig Transport, Set-Up and Safety
Credits: 2.00
This course covers the safety and regulatory issues regarding the transportation and commissioning of standard industry drilling/boring rigs for GeoExchange borehole construction. DOT issues concerning weight, trailering, CDL licensure etc. are covered. Site safety to minimize environmental impact of rig, drilled spoils and personnel protection from overhead and underground hazards are also covered.

501-101
Medical Terminology
Credits: 3.00
This course focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms, with an emphasis on spelling, definition, and pronunciation. They are introduced to operative, diagnostic, therapeutic, and symptomatic terminology of all body systems, as well as

systemic and surgical terminology. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro or achieve the required placement test score

501-107
Digital Literacy for Healthcare
Credits: 2.00
The focus of this course is the use of technology in healthcare. Learners use common business software applications, including word processing, presentation, spreadsheet, and databases. Communication methods using technology are addressed. Learners gain experience with using the electronic health record (EHR). Healthcare EHR security issues, social media use, and digital healthcare resources are examined.

501-107
Digital Literacy for Healthcare
Credits: 2.00
The focus of this course is the use of technology in healthcare. Learners use common business software applications, including word processing, presentation, spreadsheet, and databases. Communication methods using technology are addressed. Learners gain experience with using the electronic health record (EHR). Healthcare EHR security issues, social media use, and digital healthcare resources are examined.

502-301
Shampoo Treatments
Credits: 1.00
Theory and practical training in shampooing, scalp massage, scalp and hair analysis, and procedures for treating scalp and hair conditions. Students apply knowledge and skills on customers in patron laboratories to complete competencies in subject areas.

502-308
Salon Service 5 Perming
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of basic perming and texture skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum grade C,TR; Take

502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-353 - Perm Techniques; Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-309
Salon Service 6 Men's Haircutting
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of men's haircutting skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-353 - Perm Techniques; Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-310
Salon Service 7 Hair Color
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of hair color skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C,TR; Take 502-347 - Bleaching; Minimum Grade C,TR; Take 502-348 - Chemical Straightening; Minimum Grade C,TR; Take 502-349 - Facials; Minimum Grade C,TR; Take 502-350 - Hair Design 1; Minimum Grade C,TR; Take 502-351 - Hair Design 2; Minimum Grade C,TR; Take 502-352 - Men's Haircutting; Minimum Grade C,TR; Take 502-353 - Perm Techniques; Minimum Grade C,TR; Take 502-366 - Women's Haircutting; Minimum Grade C,TR;

502-311
Salon Service 10 Interpersonal Skills
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of interpersonal skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C, TR; Take 502-345 - Basic Hair Color; Minimum Grade C, TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C, TR; Take 502-347 - Bleaching; Minimum Grade C, TR; Take 502-348 - Chemical Straightening; Minimum Grade C, TR; Take 502-349 - Facials; Minimum Grade C, TR; Take 502-350 - Hair Design 1; Minimum Grade C, TR; Take 502-351 - Hair Design 2; Minimum Grade C, TR; Take 502-353 - Perm Techniques; Minimum Grade C, TR; Take 502-352 - Men's Haircutting; Minimum Grade C, TR; Take 502-366 - Women's Haircutting; Minimum Grade C, TR;

502-312
Barber/Cosmetology/Introduction to
Credits: 1.00
This course provides knowledge in the general subjects pertaining to barber/cosmetology, including: bacteriology, sanitation, anatomy and physiology, Wisconsin laws, basic chemistry, and electricity.

502-320
Basic Manicuring
Credits: 1.00
Students will receive theory and practice training in basic and advanced manicuring, pedicuring, and nail art procedures and techniques.

502-324
Barber/Cosmetology Industry
Credits: 2.00
This course is designed as a complete program of business instruction for the barber/cosmetology student. It supplements the usual technical training required in career development.

502-337
Manicure/Nail Technician I
Credits: 4.00
Theory and practical training in basic and advanced manicuring, pedicuring and nail art procedures and techniques. Students apply knowledge and skills on clients in a simulated salon environment to complete the competencies in the subject area. Students completing both Manicure/ Nail Technician courses are eligible to take a state board examination for a manicurist license. PREREQUISITES: Students must be accepted to certificate 90-502-1, Nail Technician, to be eligible to register for this course. COREQUISITES: TAKE 502-338 - Manicure/Nail Technician II

502-338
Manicure/Nail Technician II
Credits: 5.00
Theory and practical training in basic and advanced artificial nail procedures and techniques. Students apply knowledge and skills on clients in a simulated salon environment to complete competencies in subject areas. PREREQUISITES: Students must be accepted to certificate 90-502-1, Nail Technician, to be eligible to register for this course. COREQUISITES: TAKE 502-337 - Manicure/Nail Technician I

502-345
Basic Hair Color
Credits: 2.00
Theory and practical training in haircoloring techniques, procedures, and formulations.

502-347
Bleaching
Credits: 2.00
Theory and practical training in bleaching techniques, procedures, and stages of lightening hair. PREREQUISITES: Course 502-345 - Basic Hair Color

502-348
Chemical Straightening
Credits: 2.00

Theory and practical training in chemical and related hair relaxing techniques and procedures. PREREQUISITES: Course 502-353 - Perm Techniques

502-349
Facials
Credits: 2.00
Theory and practice training in facial massage, skin care, basic and corrective makeup application, eyebrow arching, waxing, lash and brow tinting, and seasonal color analysis.

502-350
Hair Design 1
Credits: 2.00
Theory and practice training in artistic design, setting, and finishing techniques. Use of blow dryer, curling iron, and rollers.

502-351
Hair Design 2
Credits: 2.00
Theory and practical training in wigs and hair pieces, hair pressing, and long hair designs.

502-352
Men's Haircutting
Credits: 2.00
Theory and practice training in haircutting concept, basic form techniques, and mustache and beard trims. Use of clippers, scissors, and thinning shears is included. PREREQUISITES: Course 502-366 - Women's Haircutting

502-353
Perm Techniques
Credits: 2.00
Theory and practical training in basic and advanced permanent waving procedures.

502-354
Salon Service 1 Facial Skin Care
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of facials and skin care. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-353 - Perm Techniques; Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-355
Salon Service 2 Nail Skills
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of basic nail service skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C,TR; Take 502-347 - Bleaching; Minimum Grade C,TR; Take 502-348 - Chemical Straightening; Minimum Grade C,TR; Take 502-349 - Facials; Minimum Grade C,TR; Take 502-350 - Hair Design 1; Minimum Grade C,TR; Take 502-351 - Hair Design 2; Minimum Grade C,TR; Take 502-352 - Men's Haircutting; Minimum Grade C,TR; Take 502-353 - Perm Techniques; Minimum Grade C,TR; Take 502-366 - Women's Haircutting; Minimum Grade C,TR;

502-356
Salon Service 3 Long Hair Design
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of hairstyling and finishing techniques on long hair. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum

Grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-353 - Perm Techniques; Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-361
Salon Service 8 Hairstyling
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of hairstyling and finishing techniques. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-353 - Perm Techniques Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-362
Salon Service 9 Chemical Relaxing
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of chemical straightening and texture skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-353 - Perm Techniques; Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-364
Salon Service 11 Bleaching
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of bleaching and special effects skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C,TR; Take 502-347 - Bleaching; Minimum Grade C,TR; Take 502-348 - Chemical Straightening; Minimum Grade C,TR; Take 502-349 - Facials; Minimum Grade C,TR; Take 502-350 - Hair Design 1; Minimum Grade C,TR; Take 502-351 - Hair Design 2; Minimum Grade C,TR; Take 502-352 - Men's Haircutting; Minimum Grade C,TR; Take 502-353 - Perm Techniques; Minimum Grade C,TR; Take 502-366 - Women's Haircutting; Minimum Grade C,TR;

502-365
Salon Service 12 Shampoo
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of shampooing skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C,TR; Take 502-347 - Bleaching; Minimum Grade C,TR; Take 502-348 - Chemical Straightening; Minimum Grade C,TR; Take 502-349 - Facials; Minimum Grade C,TR; Take 502-350 - Hair Design 1; Minimum Grade C,TR; Take 502-351 - Hair Design 2; Minimum Grade C,TR; Take 502-352 - Men's Haircutting; Minimum Grade C,TR; Take 502-353 - Perm Techniques; Minimum Grade C,TR; Take 502-366 - Women's Haircutting; Minimum Grade C,TR;

502-366
Women's Haircutting
Credits: 2.00
Theory and practice training in hair cutting concepts and basic form techniques. Use of tools such as scissors, razors, and thinning shears.

502-367
Salon Service 4 Women's Haircutting
Credits: 1.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of women's haircutting skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C,TR; Take 502-347 - Bleaching; Minimum Grade C,TR; Take 502-348 - Chemical Straightening; Minimum Grade C,TR; Take 502-349 - Facials; Minimum Grade C,TR; Take 502-350 - Hair Design 1; Minimum Grade C,TR; Take 502-351 - Hair Design 2; Minimum Grade C,TR; Take 502-352 - Men's Haircutting; Minimum Grade C,TR; Take 502-353 - Perm Techniques; Minimum Grade C,TR; Take 502-366 - Women's Haircutting; Minimum Grade C,TR;

502-370
Mock Board Skills
Credits: 2.00
The Mock Board skills course is designed to prepare the student for the practical portion of the Wisconsin Cosmetology State Board exam. Students will practice Practical skills on mannequins to gain accuracy and speed in each service area required to successfully pass the exam. Students will complete a final practical exam for the Cosmetology program.

502-371
Mock Board Theory
Credits: 1.00
The Mock Board Theory course is designed to prepare the student for the written portion of the Wisconsin Cosmetology state board exam. Students will acquire study skills and practice test taking skills on computers to retain information necessary to successfully pass the exam. Students will complete a final written exam for the Cosmetology program.

502-372
Basic Manicuring
Credits: 2.00

Students will receive theory and practice training in basic and advanced manicuring, pedicuring, and nail art procedures and techniques.

502-373
Salon Service 7 Hair Color
Credits: 2.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of hair color skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-353 - Perm Techniques; Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-374
Salon Service 8 Hairstyling
Credits: 2.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of hairstyling and finishing techniques. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C,TR; Take 502-347 - Bleaching; Minimum Grade C,TR; Take 502-348 - Chemical Straightening; Minimum Grade C,TR; Take 502-349 - Facials; Minimum Grade C,TR; Take 502-350 - Hair Design 1; Minimum Grade C,TR; Take 502-351 - Hair Design 2; Minimum Grade C,TR; Take 502-352 - Men's Haircutting; Minimum Grade C,TR; Take 502-353 - Perm Techniques; Minimum Grade C,TR; Take 502-366 - Women's Haircutting; Minimum Grade C,TR;

502-375
Salon Service 9 Chemical Relaxing
Credits: 2.00

In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of chemical straightening and texture skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum Grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum Grade C,TR; Take 502-347 - Bleaching; Minimum Grade C,TR; Take 502-348 - Chemical Straightening; Minimum Grade C,TR; Take 502-349 - Facials; Minimum Grade C,TR; Take 502-350 - Hair Design 1; Minimum Grade C,TR; Take 502-351 - Hair Design 2; Minimum Grade C,TR; Take 502-352 - Men's Haircutting; Minimum Grade C,TR; Take 502-353 - Perm Techniques; Minimum Grade C,TR; Take 502-366 - Women's Haircutting; Minimum Grade C,TR;

502-376
Salon Service 10 Interpersonal Skills
Credits: 2.00
In this course, students will be required to perform all client service skills in the student salon, with the concentration and evaluation being on the performance of interpersonal skills. PREREQUISITES: Take 502-301 - Shampoo Treatments; Minimum Grade C,TR; Take 502-345 - Basic Hair Color; Minimum grade C,TR; Take 502-320 - Basic Manicuring OR 502-372 - Basic Manicuring; Minimum grade C,TR; Take 502-347 - Bleaching; Minimum grade C,TR; Take 502-348 - Chemical Straightening; Minimum grade C,TR; Take 502-349 - Facials; Minimum grade C,TR; Take 502-350 - Hair Design 1; Minimum grade C,TR; Take 502-351 - Hair Design 2; Minimum grade C,TR; Take 502-352 - Men's Haircutting; Minimum grade C,TR; Take 502-353 - Perm Techniques; Minimum grade C,TR; Take 502-366 - Women's Haircutting; Minimum grade C,TR;

502-377
Mock Board Theory
Credits: 2.00
The Mock Board Theory course is designed to prepare the student for the written portion of the Wisconsin Cosmetology state board exam. Students will acquire study skills and practice test taking skills on computers to retain information necessary to successfully pass the exam. Students will complete a final written exam for the Cosmetology program.

502-380
Eyelash Extensions
Credits: 1.00
In this course, students examine eyelash extensions. They explore the anatomy and physiology of eyes and eyelashes and practice eyelash application and removal techniques. Students analyze methods of disinfection, safety, and infection control. They explore marketing and client management. Upon completion of the course, students will receive a certificate of completion, and they will be able to skillfully apply eyelash extensions.

502-508
People Skills
Credits: 0.25
This course provides the student with the fundamental skills needed to understand and communicate with people. Instruction will be mainly theoretical and will follow a lecture discussion format.

502-509
Shaving/Male Facials
Credits: 0.50
This course is designed to enable the student to acquire the theory requirements for male facials as mandated by the Wisconsin Statutes and Administrative Codes. Instruction will be mainly theoretical and will follow a lecture/discussion format. Some demonstrations of practical skill will be included in the lectures.

502-518
Haircutting for Cosmetology Apprentice
Credits: 1.00
This course is designed to enable the apprentice student with theory knowledge of haircutting as mandated by the Wisconsin Statutes and Administrative Codes for the Cosmetology Examining Board. Instruction will be mainly theoretical and follow a lecture/discussion format. Some demonstrations of practical skills will be included within lectures. Both individual and group assignments will be required to reinforce instruction.

502-519
Hairstyling for Cosmetology Apprentice
Credits: 1.00
This course is designed to enable the apprentice student with theory knowledge of hairstyling as mandated by the Wisconsin Statutes and Administrative Code for the Cosmetology Examining Board. Instruction will be mainly theoretical and follow a lecture/discussion format. Some demonstrations of practical skills will be included within lectures. Both individual and group assignments will be required to reinforce instruction.

502-522
COS Professional Development
Credits: 0.50
This course is designed to provide fundamental guidelines for lifelong professional development. Instruction will be mainly theoretical and will follow a lecture/discussion format.

502-523
Salon Ecology for Cosmetology App
Credits: 0.50
This course is designed to give the student a foundation for safe infection control practices and procedures that will be used in all aspects of the students' education and future salon pursuits as mandated by the Department of Safety and Professional Services. Instruction will be mainly theoretical and will follow a lecture/discussion format.

502-524
Trichology for Cosmetology App
Credits: 0.50
This course provides fundamental knowledge regarding the phases of hair growth, common hair disorders, causes and treatments of hair loss as mandated by the Wisconsin Statutes and Administrative Codes for the Cosmetology Examining Board. Instruction will be mainly theoretical and will follow a lecture/discussion format.

502-525
Shampoo/Haircare for Cosmetology App
Credits: 0.50
This course is designed to enable the apprentice student with theory knowledge of Shampoo/Hair Care, and the skills needed during draping, shampooing, and scalp massage procedures as mandated by the Wisconsin Statues and Administrative Codes for the Cosmetology Examining board. Instruction will be mainly theoretical and follow a lecture/discussion format. Some demonstrations of practical skills will be included within lectures. Both individual and group assignments will be required to reinforce instruction.

502-543
Permanent Waving for Cosmetology App
Credits: 0.75
This course is designed to enable the apprentice student with theory knowledge of Permanent Waving as mandated by the Wisconsin Statutes and Administrative Codes for the Cosmetology Examining Board. Instruction will be mainly theoretical and follow a lecture/discussion format. Some demonstrations of practical skills will be included within lectures. Both individual and group assignments will be required to reinforce instruction.

502-544
Chemical Relaxing for Cosmetology App
Credits: 0.50
This course is designed to enable the apprentice student with theory knowledge of chemical relaxing as mandated by the Wisconsin Statutes and Administrative Codes for the Cosmetology Examining Board. Instruction will be mainly theoretical and follow a lecture/discussion and hands on performance format.

502-545
Haircolor/Hair Lightening for Cos App
Credits: 1.00
This course is designed to enable the apprentice student with theory knowledge of haircoloring/hair lightening as mandated by the Wisconsin Statutes and Administrative Codes for the Cosmetology Examining Board. Some demonstrations of practical skills

will be included within lectures. Both individual and group assignments will be required to reinforce instruction.

502-547
Facial/Makeup/Skin Disorders for Cos
Credits: 1.00
This course is designed to enable the apprentice student with theory knowledge of facial, makeup, skin disorders and massage as mandated by the Wisconsin Statutes and Administrative Codes for the Cosmetology Examining Board. Instruction will be mainly theoretical and follow a lecture/discussion format. Some demonstrations of practical skills will be included within lectures. Both individual and group assignments will be required to reinforce instruction.

502-548
Manicure/Pedicurei/Artif Nails for Cos
Credits: 1.00
This course will provide the Apprentice student with knowledge of Manicuring/Pedicuring and artificial nails as mandated by the Wisconsin Statues and Administrative Codes for the Cosmetology Examining Board. The class will be taught by the following methods: lecture, discussion, demonstration and hands on performance.

502-560
Barber/Cosmetology State Board Preparation
Credits: 0.25
This course is designed to prepare the Apprentice Student for taking the State Board Exam. A practical mock exam will be given to acquaint the student with the procedures for testing. There will be a hands-on and a written test.

502-561
Mock State Board Prep
Credits: 0.25
This class is designed to help Barbers and Cosmetologists successfully pack for their state board. It is designed to leave the guessing at the door, so you know up front what is needed for each portion of the practical test, and how to label and assemble tools and materials. COREQUISITES: Course 502-560 - Barber/Cosmetology State Board Preparation

502-580
Trichology for Barbering
Credits: 0.50
This course provides fundamental knowledge regarding the phases of hair growth, common hair disorders and causes and treatments for hair loss. Instruction will be mainly theoretical and will follow a lecture/discussion format.

502-581
Professional Development for Barbering
Credits: 0.25
This course is designed to provide fundamental guidelines for lifelong professional development and personal development. Instruction will be mainly theoretical and will follow a lecture/discussion format.

502-582
Hair Styling for Barbering
Credits: 1.00
This course will provide the apprenticeship student with knowledge of Hairstyling set by the guidelines of the Wisconsin Statutes and Administrative Codes for the Barbering Examining Board. The class will be taught by the following methods: lecture, discussion, demonstration, and hands-on performance.

502-583
Shampoo for Barbering
Credits: 0.50

This course provides the student with fundamental knowledge of hair care and the skills needed during draping, shampooing, and scalp massage procedures.

502-584
Skin Related Disorders for Barbering
Credits: 0.25
This course is designed to enable the Apprentice student to acquire the theory requirements for Skin/Related disorders as mandated by the Wisconsin Statutes and Administrative Codes for the Barbering Examining Board. Instruction will be mainly theoretical and will follow a lecture /discussion format. Both individual and group assignments will be required to reinforce instruction.

502-586
Hair Cutting for Barbering
Credits: 1.25
This course is designed to enable Apprentice students to acquire the theory requirements as mandated by the Wisconsin Statutes and Administrative Codes for the Barbering Examining Board. Instruction will be mainly theoretical and will follow a lecture/discussion format. Some demonstrations of practical skills will be included within the lectures. Both individual and group assignments will be required to reinforce interaction.

502-587
Barbering Codes
Credits: 0.25
This course is designed to enable students to acquire knowledge of the Wisconsin laws and Administrative Code that governs state Barbers. Instruction will be theoretical and will follow a lecture/discussion format.

502-588
Barbering Laws
Credits: 0.25
This course is designed to enable students to acquire knowledge of the Wisconsin Rules of the Department of Regulations and Licensing.

502-589
Salon Ecology for Barbering
Credits: 0.50
This course is designed to give the student a foundation for safe and infection control practices and procedures that will be used in all aspects of the student's education and future salon pursuits. Instruction will be mainly theoretical and will follow a lecture/discussion format.

502-590
Chemical Relaxing for Barbering
Credits: 0.25
This course will provide the Apprentice student with knowledge of chemical relaxing theory set by barber examining Board and the Wisconsin Statutes and Administrative Codes. This class will be taught by the following methods: lecture, discussion, demonstration, and hands-on performance.

502-592
Perming for Barbering
Credits: 1.00
This course is designed to enable students to acquire knowledge of Permanent Waving. Instruction will be theoretical and will follow a lecture/discussion format, with demonstrations and hands-on performance.

502-593
Hair Color for Barbering
Credits: 1.00
This course is designed to enable the Apprentice Student to acquire the theory requirements for Hair Coloring as mandated by the Wisconsin Statutes and Administrative Codes for the Barbering Examining Board. Instruction will be mainly theoretical and will follow a lecture. Discussion format. Some demonstrations of Practical skills will be included with the lectures. Both individual and group assignments will be required.

502-594
Bleaching for Barbering
Credits: 0.25
This course is designed to enable the Apprentice Student to acquire the theory requirements for Bleaching as mandated by the Wisconsin Statutes and Administrative Codes for the Barbering Examining Board. Instruction will be mainly theoretical and will follow a lecture. Discussion format. Some demonstrations of Practical skills will be included with the lectures. Both individual and group assignments will be required.

502-596
Shampooing, Trichology & Hairstyling
Credits: 2.00
This course provides apprentices with fundamental knowledge of hair care and develops skills required during draping, shampooing and scalp massage procedures. In addition, it examines the phases of hair growth, common hair disorders, and causes and treatments for hair loss. The final portion of the course explores hairstyling guidelines established by the Wisconsin Statutes and Administrative Codes for the barbers. The course is recommended as the first semester of the barbering apprenticeship related instruction.

502-597
Barber Professional Development
Credits: 2.00
Apprentices will examine opportunities for lifelong learning and professional development. In addition, the course examines diseases and disorders of the skin, shaving, male facials, and hair cutting as mandated by the Wisconsin Statutes and Administrative Codes for the Barbering Examining Board. The course is recommended for the second semester of the barbering apprenticeship related instruction.

502-598
Barber Laws, Infection Control, and Chem
Credits: 2.00
Apprentices will examine the rules and regulations for barbers in Wisconsin. In addition, the course explores safety, sanitation, disinfection, and infection control practices and procedures that are common to all aspects of the barbershop and salon. Apprentices

will also examine the theory and concepts surrounding chemical relaxing and permanent waving as mandated by the Wisconsin Statutes and Administrative Codes for the barbers. This course is recommended as the third semester of the barbering apprenticeship related instruction.

502-599
Hair Color, Lightening, Interpersonal
Credits: 2.00
Apprentices will examine the theory requirements for hair coloring and bleaching as mandated by the Wisconsin Statutes and Administrative Codes for the barbers. In addition, apprentices will develop fundamental skills needed to understand and communicate with people. A final review of the Wisconsin laws and administrative codes that govern the state barbers will be covered in preparation for state licensure exams.

502-730
Client Services 1 Haircutting
Credits: 2.00
This course introduces client services performed by the barber. Emphasis is on hair and scalp analysis, shampooing, haircutting techniques, shaving, and chemical services. Students will apply knowledge and skills to provide all barber services on customers in the client lab. Skill development, increased speeds, and greater accuracy will be assessed in these lab courses. PREREQUISITES: TAKE 502-735 - Advanced Haircutting TAKE 502-738 - Basic Haircutting TAKE 502-739 - Chemical Texturing TAKE 502-740 - Hair Color TAKE 502-741 - Hairstyling TAKE 502-743 - Shaving

502-731
Client Service 2 Chemical Services
Credits: 2.00
In this course students explore client services performed by the barber. Emphasis is on hair and scalp analysis, shampooing, haircutting techniques, shaving, facial services, and chemical services. Students will apply knowledge and skills to provide all barber services on customers in the client lab. Skill development, increased speeds, and greater accuracy will be assessed in these lab courses. PREREQUISITES: TAKE 502-735 - Advanced Haircutting TAKE 502-738 - Basic Haircutting TAKE 502-739 -

Chemical Texturing TAKE 502-740 - Hair Color TAKE 502-741 - Hairstyling TAKE 502-743 - Shaving

502-732
Client Service 3 Male Facial/Shaving
Credits: 2.00
In this course students practice building speed and accuracy in client services performed by the barber. Emphasis is on haircutting techniques, shaving, facial services, and chemical services. Students will apply knowledge and skills to provide all barber services on customers in the client lab. Skill development, increased speeds, and greater accuracy will be assessed in these lab courses. PREREQUISITES: TAKE 502-735 - Advanced Haircutting TAKE 502-738 - Basic Haircutting TAKE 502-739 - Chemical Texturing TAKE 502-740 - Hair Color TAKE 502-741 - Hairstyling TAKE 502-743 - Shaving

502-733
Client Service 4 Mock Board Skills
Credits: 2.00
In this course students enhance speed and accuracy in client services performed by the barber. Emphasis is on haircutting techniques, shaving, facial services, and chemical services. Students will apply knowledge and skills to provide all barber services to customers in the client lab and begin preparation for the Wisconsin State Barber licensing exam. PREREQUISITES: TAKE 502-735 - Advanced Haircutting TAKE 502-738 - Basic Haircutting TAKE 502-739 - Chemical Texturing TAKE 502-740 - Hair Color TAKE 502-741 - Hairstyling TAKE 502-743 - Shaving

502-733
Client Service Skills 4
Credits: 2.00
In this course students enhance speed and accuracy in client services performed by the barber. Emphasis is on haircutting techniques, shaving, facial services, and chemical services. Students will apply knowledge and skills to provide all barber services to customers in the client lab and begin preparation for the Wisconsin State Barber licensing exam. PREREQUISITES: TAKE 502-735 - Advanced Haircutting TAKE

502-738 - Basic Haircutting TAKE 502-739 - Chemical Texturing TAKE 502-740 - Hair Color TAKE 502-741 - Hairstyling TAKE 502-743 - Shaving

502-734
Client Service 5 State Board Prep
Credits: 2.00
This course provides students with opportunities to acquire barbering skills in preparation for entry-level, licensed employment. Emphasis is on providing services with speed and accuracy including hair and scalp analysis, shampooing, haircutting, shaving, facial services, and chemical services. Students will apply knowledge and skills to provide all barber services on customers in the client lab and complete preparation for Wisconsin State Barber licensing exam. PREREQUISITES: TAKE 502-735 - Advanced Haircutting TAKE 502-738 - Basic Haircutting TAKE 502-739 - Chemical Texturing TAKE 502-740 - Hair Color TAKE 502-741 - Hairstyling TAKE 502-743 - Shaving

502-734
Client Serv. 5 State Board Skills/Prep
Credits: 2.00
This course provides students with opportunities to acquire barbering skills in preparation for entry-level, licensed employment. Emphasis is on providing services with speed and accuracy including hair and scalp analysis, shampooing, haircutting, shaving, facial services, and chemical services. Students will apply knowledge and skills to provide all barber services on customers in the client lab and complete preparation for Wisconsin State Barber licensing exam. PREREQUISITES: TAKE 502-735 - Advanced Haircutting TAKE 502-738 - Basic Haircutting TAKE 502-739 - Chemical Texturing TAKE 502-740 - Hair Color TAKE 502-741 - Hairstyling TAKE 502-743 - Shaving

502-735
Advanced Haircutting
Credits: 2.00
This course is designed to provide skills relating to men’s haircutting. Course competencies include demonstrating draping; Afro haircuts; flat top and crew cut haircuts; fade haircuts; and head shaving. Learners perform four basic haircutting techniques using shears, razors and clippers. Learner will perform a variety of shorthair

combination cuts using finger-and-shear, comb-over-shear, shear-over-comb and freehand techniques. Additional techniques include long-layered haircut techniques; uniform layer haircut techniques; combination cut techniques; short taper cut using finger and shear techniques; short taper cut using shear-over-comb techniques; taper cut using clipper-over-comb techniques; and haircutting for tightly curled hair. PREREQUISITES: Course 502-738 - Basic Haircutting

502-736
Barber Industry
Credits: 2.00
This course guides the barber on a career path that includes skills related to career strategies and the job search, the basics of managing a successful establishment, developing a marketing plan, and the responsibilities of adhering to the Wisconsin Statutes and Administrative Code. This course also provides an overview of the profession of barbering, professional image, safety and decontamination in the barbershop. Course competencies include examining the importance of barbering organizations and the Department of Safety and Professional Services; comparing professional ethics and personal ethics; developing short term and long term goals; reviewing basic first aid, safety and decontamination principles for infection control; introducing current state statutes and rules as they apply to barber safety and sanitation; and learning decontamination procedures for tools, equipment and surfaces.

502-738
Basic Haircutting
Credits: 2.00
This course will provide students with knowledge of the art and science of haircutting. Students will identify principal tools and implements, apply haircutting terminology, recognize facial shapes and anatomical features, and learn techniques to create a variety of haircutting designs. Students will apply safety and sanitation procedures adhering to the Wisconsin Statutes and Administrative codes. This course also introduces a combination of haircutting techniques and tools. Learners perform four basic haircutting techniques using shears, razors and clippers. Learner will perform a variety of shorthair combination cuts using finger-and- shear, comb-over-shear, shear-over-comb and freehand techniques.

502-739
Chemical Texturing
Credits: 2.00
This course will provide students with the knowledge of permanent waving. Course competencies include performing hair and scalp analysis; follow safety and sanitation procedures; explaining the physical and chemical actions that take place during chemical texture services; perform the basic perm wrap, curvature wrap, spiral wrap, bricklay wrap, and double-tool/piggyback wrap; hair relaxing applications and procedures, and reformation curl/chemical blow-out services. This class includes the following instructional methods: lecture, discussion, demonstration, and hands-on performance.

502-740
Hair Color
Credits: 2.00
Students study the color wheel and the theory behind the 'Law of Color.' Students mix and apply temporary, semi-permanent, demi-permanent and permanent colors; Students identify the chemicals used in hair coloring services. Students practice client consultations, analysis and follow safety and sanitation procedures. Students learn procedures related to lightning techniques. They identify the products used to create and maintain these types of services. Students learn the chemistry of lightening products. They learn cap, foiling and corrective color procedures.

502-741
Hairstyling
Credits: 2.00
This course emphasizes wet and dry hairstyling and includes hair analysis, shampooing, conditioning, reconditioning, scalp and hair treatments, and blow drying. Course competencies include analyzing the condition of a client's hair; personalizing scalp and hair treatments based on client needs; completing shampoo services; completing hair conditioning treatments; creating blow-dry styles; and braiding hair according to client needs. This course also emphasizes finger waves, pin curls, roller setting, thermal styling, and hair replacement techniques. Content also includes applying basic techniques and terminology used in hairstyling; creating finger waves; arranging hair using pin curls; performing roller sets; demonstrating thermal styling; and demonstrating hair replacement techniques.

502-742
Barbering, Intro to
Credits: 1.00
Students will study microbiology, electricity, anatomy, physiology and chemistry, along with properties and disorders of the skin and scalp as these apply to barbering. Course competencies include reviewing the human systems important to barbering, diseases, and conditions; learning about bacteria; categorizing chemicals and their use in the barbering establishment; verifying diseases and disorders of the hair and scalp; and examining common electrical devices used in barbering establishments. This course also introduces current state statutes and rules as they apply to barber safety and sanitation; and learning decontamination procedures for tools, equipment and surfaces.

502-743
Shaving
Credits: 2.00
Students will apply safety and sanitation, facial physiology, and techniques to create a variety of facial hair designs and complete facial hair removal. Course competencies include proper infection control procedures and client safety; draping clients for facial hair services; using facial hair service tools; analyzing skin types and conditions; adapting facial hair designs for individual facial features and physiology; completing facial hair designs; and completing facial hair removal. In this course the student will analyze the skin for diseases and disorders. The learner will identify facial muscles and nerves and explain the benefits of facial massage and treatments. Students will demonstrate a male facial using a variety of products and equipment based on skin analysis and complete male facials correctly.

502-750
Haircutting for Cosmetologists
Credits: 0.75
Students will learn basic haircutting procedures to include disinfection and proper use of tools.

502-751
Cosmetology Laws and Rules
Credits: 0.75
Focuses on laws and rules affecting barber cosmetology in the state of Wisconsin.

502-752
Professional Development Cosmetologists
Credits: 0.50
Examines the policies and responsibilities of the Barber/Cosmetology Program. Learners apply practices related to maintaining a healthy mind and body, and in determining personal qualities related to health and human relations. Also focuses on developing personal life management skills.

502-753
Cosmetology Salon Ecology
Credits: 0.75
Focuses on different types of organisms to prevent the spread of disease in a salon environment. Students explore basic safety and first aid methods in the salon.

502-754
Hairstyling and Design for Cosmetologist
Credits: 1.00
Focus will be on styling the hair to include fingerwaving, pincurling, roller-setting, blow-drying, thermal curling, thermal pressing, braiding, and long hairstyling. Product knowledge will be discussed. Safety and sanitation procedures will be addressed.

502-755
Cosmetology Hair and Scalp Care
Credits: 0.50
Develop skills that relate the chemistry of shampoo and conditioning products to human hair. Students identify the anatomy of the cranium, shoulders, and back as they relate to hair and scalp treatments. Students will integrate State of Wisconsin Administrative Codes related to Infection Control. Students will determine skills required in preparation for a hair and scalp treatment to include consultation skills, draping techniques, and the performance of a shampoo and scalp treatment service.

502-756
Trichology for Cosmetology
Credits: 0.50
Focus will be on the structure of the hair root and hair shaft, including descriptions of the three layers of the hair. Discussion will include the chemical bonds that make up the hair and how the bonds are affected by the services performed in the salon. Hair and scalp disorders, diseases, and hair loss will be addressed.

502-757
Hair Coloring for Cosmetologists
Credits: 1.00
This course focuses on the law of color, consultations skills, basic application techniques and formulation to safely and effectively perform a color service.

502-758
Chemical Texturizing for Cosmetologists
Credits: 1.00
Focuses on the theory of Chemical Texturizing and the application techniques and procedures related to Permanent Waving, Chemical Relaxing, and Soft Curl (Curl Reforming) Permanent Waves.

502-759
Cosmetology Salon Industry Business Ops
Credits: 0.25
Introduces the student to all the responsibilities of owning a salon. Students develop a personal career-building plan incorporating a variety of areas to help them achieve success in the profession.

502-760
Histology of the Skin for Cosmetology
Credits: 0.50

Explores the structure, composition, and related glands of the skin. Students also characterize skin diseases and disorders as contagious or non-contagious to protect themselves and their clients.

502-761
Cosmetology Skin Care Services
Credits: 1.00
This course covers skin care services to include facials, waxing, delegated medical procedures, e.g., microdermabrasion, electricity/light therapy and anatomy.

502-762
Manicuring, Pedicuring, Artificial Nails
Credits: 0.50
Applies techniques for basic manicures and pedicures. Artificial nails will also be addressed.

502-763
Nail Structure and Related Disorders
Credits: 0.50
Explores the structure and composition of the nail, nail diseases, nail disorders and conditions and the anatomy of the hand and arm.

503-106
Firefighting Principles II
Credits: 3.00
This course is structured for competency-based instruction meeting the requirements of Firefighter Level II. It includes classroom and practical training sessions and meets the objectives of the Wisconsin Firefighter II certification course. Hazardous Materials Operations is included in this course. Upon completion, students are encouraged to take the certification exam for Firefighter II, State of Wisconsin. PREREQUISITES: Course 503-142 - Firefighting Principles I or 503-720

503-117
Health and Wellness for Firefighters
Credits: 3.00
Students gain an overview of the physical, emotional, intellectual, and social dimensions of health and sustained wellness. They apply physical training techniques developed for the specific occupational demands of the Fire Service. Students will prepare for the Fire Service Candidate Physical Ability Test (CPAT), which is designed to help fire departments measure the physical ability of candidates to perform routine firefighting tasks.

503-120
Fire Science Student Internship
Credits: 2.00
This course allows students to actively participate as a 'working' member of a fire department. Students work the 24-hour shift schedule at a local fire department (excluding class times) and perform the same duties as the firefighters. Evaluation is determined by fire department officials and the course instructor. Instructor approval required to establish class schedule. PREREQUISITES: Course 503-142 - Firefighting Principles I

503-127
Fire Service Changing Technologies
Credits: 2.00
This course concentrates on the identification and application of the ever-changing advancement in technology and its impact on the fire service. Students will investigate and use applications and equipment that are reflective of the most recent advancements in fire service technology including; computerized hardware, software, digital media and fire department equipment.

503-139
Principles of Emergency Services
Credits: 3.00
This course provides an overview of fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire

service; and fire service nomenclature. This course is equivalent to 503-139 at other WTCS schools.

503-142
Firefighting Principles I
Credits: 4.00
This course includes classroom and practical training sessions on the basic fundamentals needed by entry-level firefighters and meets the objectives of the Wisconsin's Firefighter I certification course. Practical training is a major part of the course. Upon completion, students are encouraged to take the certification exam for Firefighter I, State of Wisconsin. This course is equivalent to 503-142 at other WTCS schools.

503-147
Fire Protection Systems
Credits: 4.00
This course provides information relating to the features of design and operation of fire detection and suppression systems.

503-151
Fire Prevention
Credits: 4.00
This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, and identification and correction of fire hazards. It meets all requirements for Fire Inspector I certification with the state of Wisconsin.

503-155
Fire Protection Hydraulics
Credits: 4.00
This course provides a foundation of knowledge in order to understand the principles of the use of water in fire protection. It meets all of the requirements for Driver

Operator-Pumper certification with the state of Wisconsin. PREREQUISITES: Course 503-142 - Firefighting Principles I

503-301
Firefighting Principles I
Credits: 3.00
This course includes classroom and practical training sessions on the basic fundamentals needed by entry-level firefighters and meets the objectives of the Wisconsin's Firefighter I certification course. Practical training is a major part of the course. Upon completion, students are encouraged to take the certification exam for Firefighter I, State of Wisconsin. This course is equivalent to 503-142 at other WTCS schools.

503-302
Fire Prevention
Credits: 2.00
This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, and identification and correction of fire hazards. It meets all requirements for Fire Inspector I certification with the state of Wisconsin.

503-303
Principles of Em Serv Safety & Survival
Credits: 3.00
This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

503-304
Building Construction
Credits: 3.00
A survey of building classifications and types discussing structural elements and weaknesses of each type. Emphasizing the additional damage done by fire and how fire hastens ultimate building collapse. This course is equivalent to 503-143 at other WTCS schools.

503-305
Fire Protection Hydraulics
Credits: 3.00
This course provides a foundation of knowledge to understand the principles of the use of water in fire protection. It meets all of the requirements for Driver Operator-Pumper certification with the state of Wisconsin. PREREQUISITES: Course 503-142 - Firefighting Principles I OR 503-301 - Firefighting Principles I

503-305
Driver/Operator Pumper
Credits: 3.00
This course provides a foundation of knowledge to understand the principles of the use of water in fire protection. It meets all of the requirements for Driver Operator-Pumper certification with the state of Wisconsin. PREREQUISITES: Course 503-142 - Firefighting Principles I OR 503-301 - Firefighting Principles I

503-306
Firefighting Principles II
Credits: 2.00
This course is structured for competency-based instruction meeting the requirements of Firefighter Level II. It includes classroom and practical training sessions and meets the objectives of the Wisconsin Firefighter II certification course. Hazardous Materials Operations is included in this course. Upon completion, students are encouraged to take the certification exam for Firefighter II, State of Wisconsin. PREREQUISITES: Course 503-142 - Firefighting Principles I or 503-720 or 503-301 - Firefighting Principles I

503-307
Firefighter Health & Wellness
Credits: 2.00
In this course, students examine fire service health and wellness issues. Through an examination of how, when, where, and why firefighters are injured and killed, students identify risk management strategies. Students develop a plan for personal health and fitness and prepare for the Candidate Physical Ability Test (CPAT). Upon completion of

the course, students will be able to identify specific processes, methods, and systems that reduce firefighter injuries and deaths, and they will be able to relate specific behaviors that support personal health and wellness.

504-148
Rules of Evidence
Credits: 3.00
In this course, students explore the types, proper treatment, and disposition of criminal evidence. They analyze rules for obtaining evidence, and they examine the problems of admissibility in court proceedings. Upon successful completion, students will be able to explain the various requirements that evidence must meet before it can be admitted into court. PREREQUISITES: Course 801-136 - English Composition 1 Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

504-168
Criminal Justice Administration
Credits: 3.00
In this course, students examine the functions of organization and administration as they relate to the criminal justice system. They explore recruitment, training, and retention of human resources, and they analyze funding and budgeting for organizations. Students relate management principles, practices, and communication to organizational effectiveness. Upon successful completion of the course, students will be able to explain the functions of a criminal justice organization and its administrative operations.

504-169
Criminal Justice Internship
Credits: 3.00
The Criminal Justice Studies internship provides students with an opportunity to acquire practical work experience through a supervised learning experience with a criminal justice agency related to the student's interest. Upon completion of the internship, students will be able to relate the knowledge acquired in the classroom to the performance of professional criminal justice roles. PREREQUISITES: Take 504-900 - Criminal Justice, Intro to minimum grade C OR TR 504-903 - Professional Communications minimum grade C; TAKE 504-905 - Report Writing MINIMUM GRADE

C OR TR MINIMUM GRADE C,TR; TAKE 504-903 - Professional Communications MINIMUM GRADE C OR TR MINIMUM GRADE C,TR;

504-172
Introduction to Corrections
Credits: 3.00
In this course, students examine the various historical eras of correctional philosophy. They explore the components of the United States' correctional system including sentencing, community corrections, and institutions. Students analyze the current practices of correctional institutions, and they identify alternatives to incarcerations and probation and parole. Upon completion of the course, students will be able to explain the purpose and goals of community corrections.

504-173
Cyber Crime
Credits: 3.00
Study various criminal investigation techniques related to computer and internet related crime (theft, sex crimes, white collar crime and others). Focus on data recovery and digital forensic techniques utilized by modern law enforcement agencies. Demonstrate courtroom testimony skills related to cybercrimes and participate in evidence recovery.

504-174
Security, Intro to
Credits: 3.00
Discuss historical, philosophical, legal and future trends of security. Define roles of security professionals in modern society. Study public/private security operations, and management concepts focusing on career preparation and opportunities in the field. Examine security challenges of internal theft, embezzlement, drugs and violence in the workplace.

504-177
Introduction to Criminology
Credits: 3.00
In this course, students examine what constitutes a crime and how to classify crimes. They identify criminals and differentiate between accidental and premeditated violent

crimes. Students relate certain abnormal human behavior that leads to criminal activity and study cases that demonstrate classic symptoms of violent behavior. Upon successful completion of the course, students will be able to identify common motives behind criminal activity and explain methods of deterring criminal activities.

504-178
Trends in Criminal Justice
Credits: 3.00
In this course, students examine Criminal Justice trends in the 21st century and the rapidly evolving expectations for accountability from the public. They examine the impact of terrorism, technological change, and social dynamics on the practice of criminal justice as well as the challenges of increased scrutiny from the public and the media. Upon completion of the course, students will be able to explain significant changes in the areas of leadership, structure, culture, policy, and technology as these relate to the Criminal Justice System.

504-302
Patrol Procedures
Credits: 4.00
Students will become familiar with Wisconsin traffic laws, including how to properly complete Wisconsin Uniform Traffic Citations and how to direct and control traffic effectively. They will learn to manage a complex scene, to investigate traffic accidents, take appropriate enforcement actions, the legal context for law enforcement driving, including basic patrol operation, emergency vehicle response, pursuit driving, the legal bases for making vehicle contacts, how to conduct a threat assessment to help determine the appropriate type of contact, how to conduct different types of vehicle contacts, recognize and interpret evidence of a and to OMVWI violation, and how to administer and interpret standardized field sobriety tests.

504-303
Investigations
Credits: 2.00
Students will learn techniques and procedures necessary to interview or interrogate a variety of individuals, how to recognize, process, and preserve physical evidence; law

enforcement's response to a victim of crime including the dynamics of victimization, victims' rights, and enforcement's professional responsibilities to victims. Students will also learn the statutory elements of 'sensitive crimes' and the characteristics, effects, and investigative strategies unique to them.

504-304
The Legal Context
Credits: 2.00
Students will learn the legal bases for law enforcement action such as arrest, use of force, and search and seizure, as well as the limits on law enforcement activity, the classifications of crimes and other violations into felonies, misdemeanors, and ordinance violations, and the elements of crimes listed in the criminal code, and the laws and procedures that affect juveniles, including those related to taking a juvenile into custody.

504-500
Overview of Patrol Response
Credits: 2.00
Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following WI Department of Justice 720 Academy curriculum framework Phase I topics: Critical Thinking and Decision Making, Basic Response (RESPOND), Radio Procedures, Introduction to TraCS, Traffic Law Enforcement, and First Aid/CPR/AED. This course will include the WI DOJ 720 Academy Integration Exercises.

504-501
Physical Fitness
Credits: 1.00
Through classroom lecture and on-campus lab students will apply Phases I-III Health Fitness WI Department of Justice 720 Academy curriculum framework program requirements and Officer Wellness Suicide Prevention.

504-502
Application of Investigations
Credits: 1.00

Through classroom lecture, on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase III topics of the Department of Justice 720 Academy curriculum framework: Ethics II: Moral Reasoning and Professional Responsibility, Cultural Competence II: Fair and Impartial Policing, Interrogations, Testifying in Court, Crimes III and Physical Evidence.

504-503
Overview of Criminal Justice
Credits: 1.00
Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase I curriculum framework topics; Academy Orientation, Fundamentals of Criminal Justice, Ethics, Cultural Competency, Agency Policy and Professional Communication.

504-504
Principles of Emergency Vehicle Response
Credits: 2.00
Through classroom lectures, on-campus labs and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Emergency Vehicle Operation and Control (EVOC) and Vehicle Contacts II.

504-505
Sensitive Crimes
Credits: 2.00
Through classroom lecture, and on-campus lab and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase III topics: Domestics, Juvenile Law, Victims, Sexual Assault, and Child Maltreatment. The DOJ Phase III Written Examination will be administered in this course.

504-506
Overview of Investigations
Credits: 2.00
Through classroom lecture, on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics: Constitutional Law I, Crimes I, Interviews, and Report Writing.

504-507
Application of Traffic Response
Credits: 3.00
Through classroom lecture, and on-campus lab and WI Department of Justice integration exercises, students will learn and apply skills addressed in the following Phase III topics from the WI Department of Justice 720 Academy curriculum framework: Traffic Law Enforcement - Core and Radar, Traffic Crash Investigations & Incident Management, Operating a Motor Vehicle While Intoxicated (OMVWI), Standardized Field Sobriety Tests (SFST), Hazardous Materials and Weapons of Mass Destruction (WMD), Incident Command Systems and NIMS, and Report Writing.

504-508
Principles of Investigations
Credits: 1.00
Through classroom lectures, on-campus labs and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Phase II topics of the WI Department of Justice 720 Academy curriculum framework: Constitutional Law II, Physical Evidence Collections, and Crisis Management. The Phase II Written Exam will be given in this course

504-509
Principles of Tactics
Credits: 5.00
Through classroom lecture and on-campus lab and integration exercises, students will learn and apply skills addressed in the following Phase II topics from the Department of Justice 720 Academy curriculum frameworks including: Professional Communication Skills II, DAAT, Firearms II, Tactical Response, and a Tactical Emergency Casualty Care.

504-510
Overview of Tactics
Credits: 1.00
Through classroom lectures, on-campus labs and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics; Fundamentals of Firearms, Vehicle Contacts I, Officer Wellness, and DAAT. The DOJ Phase I Written Examination will be administered in this course.

504-511
Scenario Assessment
Credits: 1.00
This course will consist of one week of practical scenarios demonstrating the student's proper use of force and proper use scenarios will be those authorized by Dept. of Justice for use in police recruit training

504-900
Criminal Justice, Intro to
Credits: 3.00
In this course, students analyze the roles and functions of federal and state courts. They differentiate the roles and functions of federal, state, and local law enforcement agencies and explore how law enforcement officers apply professional principles. Students examine modern police functions and policies from a historical perspective. They identify the role of law enforcement officers in American society. Students analyze correctional systems differentiating among jail, prison, and community corrections. Upon completion, students will be able to explain the different levels of law enforcement and how the criminal justice process works.

504-901
Constitutional Law
Credits: 3.00
In this course, learners will diagram the structure of the criminal justice system, identify situations where constitutional rules are applicable, identify situations where an officer may use reasonable suspicion to contact a subject, identify the elements of a lawful arrest, identify search-related activities where the 4th amendment is not applicable,

identify the requirements that pertain to search warrants, analyze situations where an officer may conduct a search without a warrant, compare the requirements for conducting routine searches with those for searching disabled persons and strip searches, identify the requirements of the laws governing confessions and statements, and analyze the various requirements that evidence must meet before it can be admitted in court. PREREQUISITES: Course 504-902 - Criminal Law COREQUISITES: Course 504-148 - Rules of Evidence

504-902
Criminal Law
Credits: 3.00
In this course, students identify the difference between crimes against people, property, and the public. Students analyze situations and determine which crimes have been committed and the elements of those crimes. Students identify the difference between statutory and constitutional defenses. Upon completion of this course, students will be able to identify the difference between a completed crime and an inchoate crime, what crime has been committed and any defenses that may be available.

504-903
Professional Communications
Credits: 3.00
In this course, the learner will apply knowledge of the communication process, apply communication techniques, integrate verbal and physical intervention skills, develop strategies to obtain information in a variety of situations, differentiate between interview and interrogation, and analyze information for consideration of corroborative evidence.

504-905
Report Writing
Credits: 3.00
In this course, students examine a variety of law enforcement reports. They identify the essential elements of communication required to accurately convey required information used by criminal justice professionals and the public. Students practice taking effective field notes, synthesizing relevant information, and writing reports. Upon

completion, students will be able to identify the information that should be included in a variety of reports, and they will be able to write narratives and organize information in reports.

504-906
Criminal Investigation Theory
Credits: 3.00
In this course, the learner will describe the role evidence plays in criminal investigations and prosecutions; apply the steps for processing crime scenes; apply appropriate strategies to locate, handle, and package evidentiary items; document the crime scene; recognize the unique investigative issues for crimes against life; apply appropriate strategies to secure the scene, collect and preserve evidence, and investigate a death; recognize the dynamics of victimization; apply knowledge of the definitions and responsibilities for law enforcement; apply appropriate interview techniques with adult or child victims; analyze the role of law enforcement in responding to domestic abuse; intervene and apply appropriate investigative strategies; respond to an officer-involved domestic violence incident; analyze the role of law enforcement in responding to sexual abuse; demonstrate investigative techniques in a simulated sexual assault case; andidentify other resources that can assist in sexual assault cases. COREQUISITES: Course 504-148 - Rules of Evidence

504-907
Community Policing Strategies
Credits: 3.00
In this course, the learner will identify community resources available in your area, describe the role of an advocacy group in the criminal justice community, demonstrate cultural self-awareness, interpret state and federal laws related to discrimination and diversity, utilize appropriate skills for interacting effectively and professionally with persons from culturally diverse backgrounds and lifestyles, identify and implement personal strategies that take into account cultural differences, identify the types of situations and the characteristics of individuals that are likely to be encountered in crisis management situations, apply Wisconsin statutory requirements and general guidelines regarding emergency detentions and emergency protective placements of persons, identify key concepts and elements associated with law enforcement response to people in crisis, apply crisis intervention principles and techniques, articulate the decision-making process taken to manage persons in crisis, incorporate community policing strategies into the community, illustrate problem-oriented policing

strategies, evaluate other policing strategies, and apply principles of crime analysis and prevention.

508-101
Dental Health Safety
Credits: 1.00
This course prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. Students will be required to show proof of CPR certification before beginning this course.

508-101
Dental Health Safety
Credits: 1.00
This course prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. Students will be required to show proof of CPR certification before beginning this course.

508-103
Dental Radiography
Credits: 2.00
This course prepares Dental Assistant students to operate x-ray units and expose bitewing, periapical, extra oral, and occlusal radiographs. Emphasis is placed on protection against x-ray hazards. Students also process, mount, and evaluate radiographs for diagnostic value. In this course, students demonstrate competency on a manikin. In addition, students expose bitewing radiographs on a peer, role-play patient. COREQUISITES: Take 508-101 - Dental Health Safety Take 508-304 - Dental and General Anatomy

508-113
Dental Materials
Credits: 2.00
This course prepares Dental Assistant students to handle and prepare dental materials such as liners, bases, cements, amalgam, resin restorative materials, gypsum products, and impression materials. They also learn to take alginate impressions on manikins and clean removable appliances.

508-120
Dental Office Management
Credits: 2.00
This course prepares Dental Assistant students to manage telephones, appointments, recall systems, and inventory. Students also develop the skills needed to process accounts receivable and payable, collections, and third-party reimbursements. PREREQUISITES: Course 508-307 - Dental Assistant Professionalism

508-302
Dental Chairside
Credits: 5.00
This course prepares dental assistant students to chart oral cavity structures, dental pathology, and restorations to and to assist a dentist with basic dental procedures including examinations, pain control, amalgam restoration, and cosmetic restoration. Students will also develop the ability to educate patients about preventative dentistry, brushing and flossing techniques, and dental procedures, using lay terminology. Throughout the course, students will apply decoding strategies to the correct use and interpretation of dental terminology. This course is equivalent to 508-302 at other WTCS schools. COREQUISITES: Take 508-304 - Dental and General Anatomy Take 508-101 - Dental Health Safety Take 508-113 - Dental Materials

508-304
Dental and General Anatomy
Credits: 2.00
This course prepares dental assistant students to apply fundamentals of general and dental anatomy to informed decision making and to professional communication with colleagues and patients. This course is equivalent to 508-304 at other WTCS schools.

508-306
Dental Assistant Clinicals
Credits: 3.00
Students apply skills learned in Dental and General Anatomy, Dental Health Safety, Dental Chairside, Dental Materials, Dental Radiography, and Professionalism in a clinical setting with patients. This course emphasizes integration of core abilities and basic occupational skills. PREREQUISITES: Students must have completed a valid CPR certification on file with the College to be eligible to register for this course. COREQUISITES: Take 508-101 - Dental Health Safety Take 508-103 - Dental Radiography Take 508-113 - Dental Materials Take 508-302 - Dental Chairside Take 508-304 - Dental and General Anatomy Take 508-307 - Dental Assistant Professionalism

508-307
Dental Assistant Professionalism
Credits: 1.00
This course prepares Dental Assistant students for professional success in a dental practice or other dental health care environment. Students develop professional appearance and image. More importantly, they learn to work within ethical guidelines and legal frameworks. In preparation for entering the workforce, students customize or develop their portfolios and lay out an ongoing professional development plan. This course is equivalent to 508-307 at other WTCS schools.

508-308
Dental Chairside - Advanced
Credits: 5.00
This course prepares Dental Assistant students to adapt chairside skills to assisting with dental specialties as they are performed in general practice. It focuses on pediatric dentistry, orthodontics, oral maxillofacial surgery, endodontics, periodontics, and prosthodontics. Students will also develop the ability to assist with sealants, perform coronal polishing, and apply topical fluoride and topical anesthetics. This course is the equivalent to 508-308 at other WTCS schools. PREREQUISITES: Course 508-302 - Dental Chairside

508-309
Dental Laboratory Procedure
Credits: 4.00
This course prepares Dental Assistant students to produce alginate impressions and fabricate diagnostic models, oral appliances, temporary restorations, and custom trays. Students also polish oral appliances. This course is equivalent to 508-309 in other WTCS schools. PREREQUISITES: Course 508-113 - Dental Materials

508-310
Dental Radiography - Advanced
Credits: 1.00
This course builds on principles and skills developed in Dental Radiography. Dental Assistant students expose full mouth series, extra-oral, and specialized radiographs on adult and child patients. Emphasis is placed on protection against x-ray hazards. Students will also process, mount, and evaluate radiographs for diagnostic value. In addition, they will use radiographs to explain dental health and treatment plans to patients. This course is the equivalent of 508-310 at other WTCS schools. PREREQUISITES: Course 508-103 - Dental Radiography

508-311
Dental Assistant Clinical - Adv
Credits: 2.00
Dental Assistant students apply skills developed in Dental Chairside - Advanced, Dental Lab Procedures, Dental Radiography - Advanced, and Dental Office Procedures in a clinical setting with patients that emphasizes integration of core abilities and basic and advanced occupational skills. This course is equivalent to 508-311 at other WTCS schools. PREREQUISITES: Complete course 508-306 - Dental Assistant Clinicals COREQUISITES: Take 508-308 - Dental Chairside - Advanced Take 508-309 - Dental Laboratory Procedure Take 508-310 - Dental Radiography - Advanced

509-301
Medical Assistant Administrative Procedures
Credits: 2.00
This course introduces medical assistant students to office management and business administration in the medical office. Students learn to schedule appointments, perform

filing, record keeping, telephone and reception duties, communicate effectively with patients and other medical care staff, and keep an inventory of supplies. Students apply introductory medical coding skills and managed care terminology. PREREQUISITES: Students must be accepted to program 31-509-1, Medical Assistant, to be eligible to register for this course. COREQUISITES: Course 501-107 - Digital Literacy for Healthcare

509-301
Medical Assistant Administrative Procedures
Credits: 2.00
This course introduces medical assistant students to office management and business administration in the medical office. Students learn to schedule appointments, perform filing, record keeping, telephone and reception duties, communicate effectively with patients and other medical care staff, and keep an inventory of supplies. Students apply introductory medical coding skills and managed care terminology. PREREQUISITES: Students must be accepted to program 31-509-1, Medical Assistant, to be eligible to register for this course. COREQUISITES: Course 501-107 - Digital Literacy for Healthcare

509-302
Human Body in Health & Disease
Credits: 3.00
This course focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis, and prevention of common diseases. PREREQUISITES: Students must be accepted to program 31-509-1 Medical Assistant or program 31-516-4 Ophthalmic Medical Assistant, to be eligible to register for this course. COREQUISITES: Course 501-101 - Medical Terminology

509-303
Medical Assistant Lab Procedures 1
Credits: 2.00
This course introduces Medical Assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform routine laboratory procedures commonly performed in the ambulatory care setting under the

supervision of a physician. Students follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology, and urinalysis testing. This course is equivalent to 509-303 at other WTCS schools. PREREQUISITES: Students must be accepted to program 31-509-1, Medical Assistant, in order to register for this course. COREQUISITES: Complete course 509-304 - Medical Assistant Clinical Procedures 1

509-304
Medical Assistant Clinical Procedures 1
Credits: 4.00
This course introduces Medical Assistant students to the clinical procedures performed in the medical office setting. Students perform basic examining room skills, including screening, vital signs, patient history, minor surgery, and patient preparation for routine and specialty exams in the ambulatory care setting. This course is equivalent to 509-304 at other WTCS schools. PREREQUISITES: Students must be accepted to program 31-509-1, Medical Assistant, in order to register for this course. COREQUISITES: Complete course 509-303 - Medical Assistant Lab Procedures 1

509-305
Medical Assistant Lab Procedures 2
Credits: 2.00
This course prepares students to perform laboratory procedures commonly performed by medical assistants in the ambulatory care setting under the supervision of a physician. Students perform phlebotomy, immunology, hematology, and chemistry laboratory procedures. PREREQUISITES: Complete 509-303 - Medical Assistant Lab Procedures 1 Student must be accepted to program 31-509-1, Medical Assistant, to be eligible to register for this course. COREQUISITES: Course 509-306 - Medical Assistant Clinical Procedures 2

509-306
Medical Assistant Clinical Procedures 2
Credits: 3.00
This course prepares students to perform patient care skills in a medical office setting. Students perform clinical procedures, including administering medications, assisting with minor surgery, performing an electrocardiogram, assisting with respiratory testing, educating patients/community, and maintaining clinical equipment in an ambulatory

care setting. PREREQUISITES: Take 509-303 - Medical Assistant Lab Procedures 1 Student must be accepted to program 31-509-1, Medical Assistant, to be eligible to register for this course. Take 509-304 - Medical Assistant Clinical Procedures 1; COREQUISITES: Course 509-305 - Medical Assistant Lab Procedures 2

509-307
Medical Office Insurance and Finance
Credits: 2.00
This course introduces students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students use medical coding and managed care terminology to perform insurance related duties. PREREQUISITES: Course 509-302 - Human Body in Health & Disease with a minimum grade of C or TR Student must be accepted to program 31-509-1, Medical Assistant, to be eligible to register for this course. Take 501-107 - Digital Literacy for Healthcare; Minimum grade C,TR;

509-307
Medical Office Insurance and Finance
Credits: 2.00
This course introduces students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students use medical coding and managed care terminology to perform insurance related duties. PREREQUISITES: Course 509-302 - Human Body in Health & Disease with a minimum grade of C or TR Student must be accepted to program 31-509-1, Medical Assistant, to be eligible to register for this course. Take 501-107 - Digital Literacy for Healthcare; Minimum grade C,TR;

509-308
Pharmacology for Allied Health Pharm for Allied Health
Credits: 2.00
This course introduces students to classifying indications into correct drug categories and applying basic pharmacology principles. Students apply basic pharmacodynamics to identifying common medications, medication preparation, and administration of medications used by the major body systems. PREREQUISITES: Course 509-302 - Human Body in Health & Disease with a minimum grade of C or TR Student must be

accepted to program 31-509-1 Medical Assistant or program 31-516-4 Ophthalmic Medical Assistant, to be eligible to register for this course.

509-309
Medical Law, Ethics, & Professionalism
Credits: 2.00
This course prepares students to display professionalism and perform within ethical and legal boundaries in the health care setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, and examine legal and bioethical issues. PREREQUISITES: Students must be accepted to program 31-509-1 Medical Assistant or program 31-516-4 Ophthalmic Medical Assistant, to be eligible to register for this course. COREQUISITES: Course 801-136 - English Composition 1 or 801-301 - Writing Principles

509-310
Medical Assistant Practicum
Credits: 3.00
This course requires students to integrate and apply knowledge and skills from all previous medical assistant courses in actual patient care settings. Learners perform medical assistant administrative, clinical, and laboratory duties under the supervision of trained mentors to effectively transition to the role of a medical assistant. This AAMA required externship lasts between 160 hours (AAMA minimum) and 216 hours. PREREQUISITES: Take 509-301 - Medical Assistant Administrative Procedures Student must be accepted to program 31-509-1, Medical Assistant, to be eligible to register for this course. COREQUISITES: Take 509-305 - Medical Assistant Lab Procedures 2 Take 509-306 - Medical Assistant Clinical Procedures 2 Take 509-307 - Medical Office Insurance and Finance Take 509-308 - Pharmacology for Allied Health Pharm for Allied Health Take 509-309 - Medical Law, Ethics, & Professionalism

510-151
Nsg: Endocrine & Electrolytes Disorders
Credits: 1.00
This course is designed to enhance the learning of nursing students in planning care for the client with disorders of the endocrine system, fluids, electrolytes, and acid-base balance. PREREQUISITES: Courses 543-105 - Nursing Health Alterations, 543-106 -

Nursing Health Promotion, 543-107 - Nursing: Clinical Care Across the Lifespan, 543-108 - Nursing: Introduction to Clinical Care Management

510-153
Nsg: Pharmacology Applications
Credits: 1.00
This course reviews the principles of pharmacology with emphasis on major drug classifications used to treat diseases. The pathophysiology approach will help the learner connect pharmacology and the nursing process to the medical/nursing treatment of a variety of clients. PREREQUISITES: Course 543-103 - Nursing Pharmacology

510-155
Principles of Gerontological Nursing
Credits: 3.00
This course is designed to prepare the nurse to care for the complexity of caring for the aged client and family. Content includes physiologic changes in aging, theories of aging, medications and laboratory values specific to the aging client, management of illnesses, diseases and conditions commonly seen in the aging population, and ethical and legal considerations.

510-160
Transition: LPN to ADN
Credits: 1.00
In this course, Licensed Practical Nurses (LPN) build on their existing knowledge while performing a variety of skills. Students perform nursing assessments, develop and apply a plan of care, research evidence-based practice, and apply theoretical principles using the human patient simulator. Upon completion of the course, students are ready to enroll in the third semester of the Associate Degree - Nursing (ADN) Program.

512-125
Surgical Technology, Intro to
Credits: 4.00
Provides the foundational knowledge of the occupational environment. Principles of sterilization and disinfection are learned. Surgical instruments are introduced. Preoperative patient care concepts are simulated. Lab practice is included. PREREQUISITES: Course 806-177 - General Anatomy and Physiology COREQUISITES: Course 501-101 - Medical Terminology

512-126
Surgical Tech Fundamentals 1
Credits: 4.00
Focuses on preparing the patient and operating room for surgery. Principles of sterile technique are emphasized as the student moves into the scrub role. Lab practice is included. PREREQUISITES: Course 806-177 - General Anatomy and Physiology Take 512-125 - Surgical Technology, Intro to COREQUISITES: Take 501-101 - Medical Terminology

512-127
Exploring Surgical Issues
Credits: 2.00
Explores a variety of issues related to surgical technology. Emphasis is placed on becoming a professional member of the surgical team. COREQUISITES: Take 512-125 - Surgical Technology, Intro to

512-128
Surgical Tech Fundamentals 2
Credits: 4.00
Focuses on enhancing surgical technology skills while functioning as a sterile team member. Lab and/or clinical practice is included. PREREQUISITES: Courses 512-125 - Surgical Technology, Intro to, 512-126 - Surgical Tech Fundamentals 1, 512-127 - Exploring Surgical Issues, and 501-101 - Medical Terminology COREQUISITES: Course 512-129 - Surgical Pharmacology Take 512-130 - Surgical Skills Application

512-129
Surgical Pharmacology
Credits: 2.00
Basic study of drug classifications, care, and handling of drugs and solutions, application of mathematical principles in dosage calculations, terminology related to pharmacology, anesthesia, and drugs used in surgery. PREREQUISITES: Take 512-125 - Surgical Technology, Intro to Take 512-126 - Surgical Tech Fundamentals 1

512-130
Surgical Skills Application
Credits: 2.00
Provides a transition from the academic to the clinical setting. Learners integrate the surgical technologist skills as they apply to various surgical procedures. PREREQUISITES: Take 512-125 - Surgical Technology, Intro to Minimum grade C,TR; Take 512-126 - Surgical Tech Fundamentals 1; Minimum grade C,TR; Take 512-127 - Exploring Surgical Issues; Minimum grade C,TR; COREQUISITES: Course 512-129 - Surgical Pharmacology Take 512-128 - Surgical Tech Fundamentals 2; Minimum grade C,TR;

512-131
Surgical Interventions 1
Credits: 4.00
Provides the foundational knowledge of surgical core and specialty procedures. Examines the pathophysiology, diagnostic interventions, health sciences, and surgical techniques for a variety of procedures. PREREQUISITES: Take 512-128 - Surgical Tech Fundamentals 2 Take 512-130 - Surgical Skills Application Take 801-136 - English Composition 1

512-132
Surgical Technology Clinical 1
Credits: 3.00
Apply basic surgical theories, principles, and procedural techniques in the operating room. Students begin to function as team members under the guidance of the instructor and authorized clinical personnel. PREREQUISITES: Take 512-128 - Surgical Tech Fundamentals 2 Minimum grade C,TR; Take 512-129 - Surgical Pharmacology;

Minimum grade C,TR; Take 512-130 - Surgical Skills Application; Minimum grade C,TR; COREQUISITES: Course 512-131 - Surgical Interventions 1

512-133
Surgical Technology Clinical 2
Credits: 3.00
Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures. PREREQUISITES: Take 512-129 - Surgical Pharmacology Minimum grade C,TR; Take 512-130 - Surgical Skills Application; Minimum grade C,TR; Take 512-132 - Surgical Technology Clinical 1; Minimum grade C,TR; COREQUISITES: Course 512-131 - Surgical Interventions 1

512-133
Surgical Technology Clinical 2
Credits: 3.00
Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures. PREREQUISITES: Take 512-129 - Surgical Pharmacology Minimum grade C,TR; Take 512-130 - Surgical Skills Application; Minimum grade C,TR; Take 512-132 - Surgical Technology Clinical 1; Minimum grade C,TR; COREQUISITES: Course 512-131 - Surgical Interventions 1

512-135
Surgical Technology Clinical 3
Credits: 3.00
Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures. PREREQUISITES: Take 512-131 - Surgical Interventions 1 Take 512-133 - Surgical Technology Clinical 2 COREQUISITES: Course 512-142 - Surgical Interventions II

512-136
Surgical Technology Clinical 4
Credits: 3.00

During this clinical course the student will function relatively independently. Serves as a transition from a student perspective to an employee by utilizing advanced skills for an entry level Surgical Technologist. PREREQUISITES: Course 512-135 - Surgical Technology Clinical 3 COREQUISITES: Course 512-142 - Surgical Interventions II

512-142
Surgical Interventions II
Credits: 4.00
Expands knowledge of core and specialty surgical procedures by incorporating pathophysiology, diagnostic interventions, health sciences, and surgical techniques. PREREQUISITES: Take 512-133 - Surgical Technology Clinical 2 Take 512-131 - Surgical Interventions 1 COREQUISITES: Take 512-135 - Surgical Technology Clinical 3 Take 512-136 - Surgical Technology Clinical 4

513-109
Blood Bank
Credits: 4.00
Focuses on blood banking concepts and procedures including blood typing, compatibility testing, work ups for adverse reaction to transfusions, disease states and donor activities. PREREQUISITES: Take 513-115 - Basic Immunology Concepts; Minimum Grade C

513-110
Lab Skills, Basic
Credits: 1.00
This course explores health career options and the fundamental principles and procedures performed in the clinical laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control procedures and perform simple laboratory tests. PREREQUISITES: Students must be accepted to program 10-513-1 Medical Laboratory Technician to be eligible to register for this course. COREQUISITES: Take 513-111 - Phlebotomy

513-111
Phlebotomy
Credits: 2.00
This course provides opportunities for learners to perform routine venipuncture, routine capillary puncture, and special collection procedures. PREREQUISITES: Students must be accepted to program 10-513-1 Medical Laboratory Technician to be eligible to register for this course. COREQUISITES: Take 513-110 - Lab Skills, Basic

513-113
QA Lab Math
Credits: 1.00
Focuses on performing the mathematical calculations routinely used in laboratory settings. You will explore the concepts of quality control and quality assurance in the laboratory.

513-114
Urinalysis
Credits: 2.00
Prepares you to perform a complete urinalysis which includes physical, chemical and microscopic analysis. You will explore renal physiology and correlate urinalysis results with clinical conditions. PREREQUISITES: Take 806-177 - General Anatomy and Physiology minimum grade of B-

513-115
Basic Immunology Concepts
Credits: 2.00
Provides an overview of the immune system including laboratory testing methods for diagnosis of immune system disorders, viral and bacterial infections. PREREQUISITES: Take 806-177 - General Anatomy and Physiology Minimum grade of B-

513-116
Clinical Chemistry
Credits: 4.00

Introduces clinical chemistry techniques and procedures for routine analysis using photometric, potentiometric and separation techniques. Topics in this course include pathophysiology and methodologies for carbohydrates, lipids, proteins, renal function and blood gas analysis. Additional topics include hepatic, cardiac markers, tumor markers, endocrine function, miscellaneous body fluids, toxicology, enzymes and electrolytes. PREREQUISITES: Take 806-186 - Biochemistry/Introduction with a minimum grade of B-

513-120
Basic Hematology
Credits: 3.00
Covers the theory and principles of blood cell production and function and introduces you to basic practices and procedures in the hematology laboratory. PREREQUISITES: Take 806-177 - General Anatomy and Physiology with a minimum grade of B-

513-121
Coagulation
Credits: 1.00
Introduces the theory and principles of coagulation and explores mechanisms involved in coagulation disorders. Emphasis is placed upon laboratory techniques used to diagnose disease and monitor treatment. PREREQUISITES: Take 513-120 - Basic Hematology; Minimum Grade C or TR

513-130
Advanced Hematology
Credits: 2.00
Explores mechanisms involved in the development of hematological disorders. Emphasis is placed upon laboratory techniques used to diagnose disorders and monitor treatment. PREREQUISITES: Take 513-120 - Basic Hematology; Minimum Grade C or TR

513-133
Clinical Microbiology
Credits: 4.00

Presents the clinical importance of infectious diseases with emphasis upon the appropriate collection, handling and identification of clinically relevant bacteria. Disease states, modes of transmission and methods of prevention and control, including antibiotic susceptibility testing, will also be discussed. PREREQUISITES: Take 806-197 - Microbiology course 806-197 - Microbiology wtih a minimum grade of B-.

513-140
Advanced Microbiology
Credits: 2.00
Provides an overview of acid fast organisms, fungi, parasites, and anaerobic bacteria. The organisms, their pathophysiology, epidemiology, the diseases and conditions that they cause, laboratory methods of handling, culturing and identification will be discussed. PREREQUISITES: Take 513-133 - Clinical Microbiology; Minimum Grade C,TR;

513-151
Clinical Experience 1
Credits: 3.00
Practice the principles and procedures of laboratory medicine as an entry level Medical Laboratory Technician (MLT) in a clinical laboratory setting. Working alongside laboratory professionals, you will collect and process specimens, operate laboratory analyzers and instruments and report results in Laboratory Information Systems. PREREQUISITES: Take 513-109 - Blood Bank; Minimum Grade C Take 513-121 - Coagulation; Minimum Grade C Take 513-130 - Advanced Hematology; Minimum Grade C Take 513-140 - Advanced Microbiology; Minimum Grade C Take 513-170 - Introduction to Molecular Diagnostics; Minimum Grade C Take 513-114 - Urinalysis

513-152
Clinical Experience 2
Credits: 4.00
Provides continuing practice for the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state-of-the-art instruments and report results on Laboratory Information Systems. PREREQUISITES: Take 513-151 - Clinical Experience 1; Minimum Grade C,TR;

513-170
Introduction to Molecular Diagnostics
Credits: 2.00
Introduces the principles and application of molecular diagnostics in the clinical laboratory. PREREQUISITES: Take 513-116 - Clinical Chemistry Minimum grade of C

515-111
Respiratory Survey
Credits: 3.00
Examines the role of the Respiratory Therapist within the healthcare community. Reviews the ethical, legal, and regulatory principles that guide practice across diverse populations. Introductory patient assessment and critical thinking processes used in the development of respiratory care plans are explored. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Students must be accepted to program 10-515-1, Respiratory Therapy Associate Degree, to be eligible to register for this course. COREQUISITES: Take 515-171 - Respiratory Therapeutics 1

515-112
Respiratory Airway Management
Credits: 2.00
Provides a comprehensive exploration of airway management concepts and skills. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Students must be accepted to program 10-515-1, Respiratory Therapy Associate Degree, to be eligible to register for this course. COREQUISITES: Take 515-174 - Respiratory/Cardiac Physiology

515-113
Respiratory Life Support
Credits: 3.00

Focuses on the management of adult ventilatory support. Emphasis is placed on the promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Take 515-112 - Respiratory Airway Management; Minimum Grade C Take 515-172 - Respiratory Therapeutics 2; Minimum Grade C Take 515-174 - Respiratory/Cardiac Physiology; Minimum Grade C Take 515-175 - Respiratory Clinical 1; Minimum Grade C COREQUISITES: Take 515-176 - Respiratory Disease Take 515-178 - Respiratory Clinical 2 Take 515-179 - Respiratory Clinical 3

515-171
Respiratory Therapeutics 1
Credits: 3.00
Introduces the topics of medical gas administration and humidity and aerosol therapy. The student will apply physics, math and patient assessment concepts to oxygen, aerosol and humidity therapy. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Take 806-177 - General Anatomy and Physiology; Minimum Grade C Student must be accepted to program 10-515-1, Respiratory Therapy Associate Degree, to be eligible to register for this course. COREQUISITES: Take 515-111 - Respiratory Survey

515-172
Respiratory Therapeutics 2
Credits: 3.00
Introduces therapeutic procedures including arterial puncture, bronchial hygiene, lung expansion therapy, and pulmonary rehabilitation. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Take 515-171 - Respiratory Therapeutics 1; Minimum Grade C COREQUISITES: Take 515-112 - Respiratory Airway Management Take 515-173 - Respiratory Pharmacology Take 515-174 - Respiratory/Cardiac Physiology

515-173
Respiratory Pharmacology
Credits: 3.00

Examines basic pharmacology principles, drug dosage, and calculations. Medications for inhalation including mucolytics, bronchodilators, and anti-inflammatories. Also includes cardiac drugs, anesthetic drugs, neuromuscular blockers, and antimicrobials. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Take 806-177 - General Anatomy and Physiology; Minimum Grade C Take 515-111 - Respiratory Survey; Minimum Grade C Take 515-171 - Respiratory Therapeutics 1; Minimum Grade C COREQUISITES: Take 515-172 - Respiratory Therapeutics 2

515-174
Respiratory/Cardiac Physiology
Credits: 3.00
Provides the student with an in-depth knowledge of the structure and function of the respiratory and circulatory systems necessary to function as a competent Respiratory Therapist. Emphasis is placed on the promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. COREQUISITES: Take 515-171 - Respiratory Therapeutics 1; Take 515-111 - Respiratory Survey

515-175
Respiratory Clinical 1
Credits: 2.00
Introduces Respiratory Therapy practice in the hospital setting. Includes the development of skills such as basic therapeutics, patient assessment, medical record review, safety practices, patient interaction, and communication. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical, students must demonstrate competence in a minimum of 5 (required and/or simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. PREREQUISITES: Take 515-111 - Respiratory Survey Take 515-171 - Respiratory Therapeutics 1 COREQUISITES: Take 515-172 - Respiratory Therapeutics 2

515-176
Respiratory Disease
Credits: 3.00
Exploration of signs, symptoms, causes, progression, and treatment of diseases or disorders of the body that affect the respiratory cardiopulmonary system. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Take 515-111 - Respiratory Survey; Minimum Grade C Take 515-112 - Respiratory Airway Management; Minimum Grade C Take 515-173 - Respiratory Pharmacology; Minimum Grade C Take 515-174 - Respiratory/Cardiac Physiology; Minimum Grade C Take 806-177 - General Anatomy and Physiology; Minimum Grade C COREQUISITES: Take 515-113 - Respiratory Life Support Take 515-178 - Respiratory Clinical 2 Take 515-179 - Respiratory Clinical 3

515-178
Respiratory Clinical 2
Credits: 3.00
Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical, students must demonstrate competence in a minimum of 12 (required and/or simulated) competencies (cumulative through all clinical courses). The instructor may identify specific competencies to be addressed during this clinical. PREREQUISITES: Take 515-175 - Respiratory Clinical 1; Minimum Grade C COREQUISITES: Take 515-113 - Respiratory Life Support Take 515-176 - Respiratory Disease Take 515-179 - Respiratory Clinical 3

515-179
Respiratory Clinical 3
Credits: 3.00
Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program

competency list. At the completion of this clinical, students must demonstrate competence in a minimum of 19 (required and/or simulated) competencies (cumulative through all clinical courses). The instructor may identify specific competencies to be addressed during this clinical. COREQUISITES: Take 515-113 - Respiratory Life Support Take 515-176 - Respiratory Disease Take 515-178 - Respiratory Clinical 2

515-180
Respiratory Neonatal and Pediatric Care
Credits: 2.00
Provides a comprehensive orientation to the field of neonatal and pediatric respiratory care to include fetal development, birth, neonatal physiology, pulmonary dynamics, abnormal cardiopulmonary conditions, diseases, noninvasive and invasive therapeutic interventions. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Take 515-113 - Respiratory Life Support; Minimum Grade C COREQUISITES: Take 515-181 - Respiratory and Cardio Diagnostics Take 515-182 - Respiratory Clinical 4 Take 515-183 - Respiratory Clinical 5

515-181
Respiratory and Cardio Diagnostics
Credits: 3.00
Focuses on advanced invasive and noninvasive diagnostic cardiopulmonary procedures including pulmonary function, hemodynamics and rescue medicine. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. PREREQUISITES: Take 515-113 - Respiratory Life Support; Minimum Grade C Take 515-173 - Respiratory Pharmacology; Minimum Grade c Take 515-176 - Respiratory Disease; Minimum Grade C COREQUISITES: Take 515-180 - Respiratory Neonatal and Pediatric Care Take 515-182 - Respiratory Clinical 4 Take 515-183 - Respiratory Clinical 5

515-182
Respiratory Clinical 4
Credits: 3.00
Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make

appropriate modifications in patient care. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical, students must demonstrate competence in a minimum of 26 (required and/or simulated) competencies (cumulative through all clinical courses). The instructor may identify specific competencies to be addressed during this clinical. PREREQUISITES: Take 515-113 - Respiratory Life Support; Minimum Grade C Take 515-179 - Respiratory Clinical 3; Minimum Grade C COREQUISITES: Take 515-180 - Respiratory Neonatal and Pediatric Care Take 515-181 - Respiratory and Cardio Diagnostics Take 515-183 - Respiratory Clinical 5

515-182
Respiratory Clinical 4
Credits: 3.00
Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical, students must demonstrate competence in a minimum of 26 (required and/or simulated) competencies (cumulative through all clinical courses). The instructor may identify specific competencies to be addressed during this clinical. PREREQUISITES: Take 515-113 - Respiratory Life Support; Minimum Grade C Take 515-179 - Respiratory Clinical 3; Minimum Grade C COREQUISITES: Take 515-180 - Respiratory Neonatal and Pediatric Care Take 515-181 - Respiratory and Cardio Diagnostics Take 515-183 - Respiratory Clinical 5

515-183
Respiratory Clinical 5
Credits: 3.00
Focuses on the completion of respiratory therapy competencies and transition to employment. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical, students must demonstrate competence in all of the required and required/simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. COREQUISITES: Take 515-180 -

Respiratory Neonatal and Pediatric Care Take 515-181 - Respiratory and Cardio Diagnostics Take 515-182 - Respiratory Clinical 4

515-183
Respiratory Clinical 5
Credits: 3.00
Focuses on the completion of respiratory therapy competencies and transition to employment. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical, students must demonstrate competence in all of the required and required/simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. COREQUISITES: Take 515-180 - Respiratory Neonatal and Pediatric Care Take 515-181 - Respiratory and Cardio Diagnostics Take 515-182 - Respiratory Clinical 4

519-324
Facilities Service OSHA
Credits: 1.00
Prepares students for custodial service employment. Introduces students to safety in the workplace, hazard communication and bloodborne pathogen protection. Students will gain knowledge of chemical fundamentals and safe handling of cleaning chemicals.

519-325
Cleaning Fundamentals
Credits: 3.00
Prepares students for custodial services employment. Develops knowledge and experience in general cleaning techniques, chemical usage, tools and equipment usage and identification of maintenance issues encountered by custodial staff. Includes common area, office/classroom, general kitchen, and restroom cleaning.

519-326
Floor Care
Credits: 2.00

Prepares students for custodial services employment. Introduces floor types, floor care chemicals and equipment. Develops knowledge and experience in assessment of current floor care needs and performance of floor care maintenance techniques (including routine, interim and restorative).

519-327
Carpet Care
Credits: 2.00
Prepares students for custodial services employment. Introduces carpet types, carpet care chemicals and equipment. Students will gain knowledge and experience in assessment of current carpet care needs and performance of carpet care maintenance techniques (routine, interim and restorative).

519-328
Green Cleaning
Credits: 1.00
Prepares students for custodial service employment. Introduces students to effective cleaning techniques and chemicals used to protect the public health without harming the environment.

520-101
Human Services/Introduction
Credits: 3.00
In this course, students examine the scope of the human service field and the principles of the human service profession. They explore human services agencies and delivery systems and the typical roles and duties of human service workers. Upon completion of the course, students will be able to explain the role of the human service worker and the environments in which they practice.

520-102
Crisis Intervention in Human Services
Credits: 3.00

Students will learn about crisis theory and its application to a variety of clientele and contexts. Students will also learn and practice a variety of verbal and non-verbal approaches to working with the client in crisis, steps in maintaining safety and will demonstrate their learning through direct, hands-on approaches. Upon successful completion of the course students will be able to obtain a certificate in Non-Violent Crisis Intervention through the Crisis Prevention Institute. This course does not teach CPI restraint methods.

520-105
Interviewing Principles & Documentation
Credits: 3.00
In this course, students explore concepts related to interviewing and documentation skills as practiced in human services agencies. They analyze and practice skills associated with active listening, proper attending, case planning, assessment, social history, and summary recording. Upon completion of the course, students will develop techniques for conducting an interview and apply case management and documentation skills as practiced in human services agencies.

520-110
Community Resources and Services
Credits: 3.00
In this course, students explore a wide variety of community agencies, resources, and programs. They assess their functions, funding sources, clients served, and eligibility requirements. Upon completion of the course, students will be able to identify and describe the characteristics of a variety of community agencies, resources, and programs.

520-115
Counseling/Introduction to
Credits: 3.00
This course is designed to provide the student with an overview of the major counseling theories, their techniques and the applications of these to various situations. The student will be able to practice the use of these counseling techniques in initiating, structuring and terminating a counseling session. PREREQUISITES: Courses 520-105 - Interviewing Principles & Documentation

520-121
Human Service Field Experience II
Credits: 3.00
The student is given the opportunity to demonstrate understanding of more advanced social work skills and techniques used in the field. This course will meet in a weekly seminar to monitor progress and address concerns. PREREQUISITES: Take 520-124 - Human Service Field Experience Minimum grade C-,TR; Take 520-140 - Group Counseling; Minimum grade C,TR;

520-124
Human Service Field Experience
Credits: 3.00
In this course, students practice applying professional Human Services skills and techniques in a Human Services setting. Under supervision, students will work directly with clients at a human service agency. Students will reflect on the demonstration of their skills with their peers. Upon successful completion of the course, students will be able to competently apply professional Human Services skills and techniques. PREREQUISITES: Take 520-127 - Professional Practices in Human Services Complete course 804-134 - Mathematical Reasoning or a higher-level math course. Take 801-136 - English Composition 1 COREQUISITES: Courses 520-140 - Group Counseling

520-127
Professional Practices in Human Services
Credits: 3.00
In this course, students examine characteristics of professionalism and effectiveness as a human service practitioner. They analyze professional ethical codes and standards for the major helping professions, and they practice applying them in a variety of case scenarios. Upon completion of the course, students will be able to apply the professional ethics of a human service practitioner to social and ethical issues.

520-128
Child Welfare Policy and Practice
Credits: 3.00

This class helps students examine the economic, social, and political aspects of children's issues. It also addresses the U.S. welfare system, including proprietary, private, voluntary, and governmental agencies.

520-140
Group Counseling
Credits: 3.00
In this course, students examine group dynamics, strategies, and therapeutic processes. They analyze the five stages of group development and explore various counseling approaches and their application to the group. Students engage in simulated counseling scenarios in which individual behaviors and motivations are identified. Upon successful completion of the course, students will be able to explain how to lead informational and supportive groups using a solution-focus model. PREREQUISITES: Courses 520-115 - Counseling/Introduction to

520-144
Human Services Program Orientation
Credits: 1.00
This course is designed to familiarize students with the field of Human Services, the resources available to them at Gateway and the expectations, support and requirements that will be necessary to complete the Human Services degree at Gateway Technical College. Focus on the course will be on how best to utilize one's strengths, navigate technology, identify needs/resources and strategies to become a successful learner.

520-150
Gerontology/Introduction to
Credits: 3.00
Identifies basic theories and facts about the aging process leading toward application of methods and techniques of serving the aged. Students will be encouraged to develop an understanding of the psychological and sociological experience of the older adult population.

520-151
Family Theory and Practice
Credits: 3.00
In this course, students explore the human service professional's role when working with families. They examine family systems theory, communication patterns, rules, and roles that impact how family members interact with each other. Students will explore how human service workers can apply interventions and strategies to improve family functioning. Students analyze the impact of stressors on family functioning using case studies. Upon completion of the course, students will be able to explain major family therapy models of practice and strategies for working with families.

520-152
Aspects of Disabilities
Credits: 3.00
In this course, students analyze the history of services and legislative processes involved in provision of services to people with disabilities. They examine various models and therapeutic interventions, and they explore different types of disability. Upon successful completion of the course, students will be able to explain medical diseases and disabilities and their impact on disabled individuals and their environments.

520-160
Correctional Processes
Credits: 3.00
A study of present correctional policies and processes in the criminal justice field as it affects today's society in terms of deterrents and rehabilitation and a look at future trends.

520-161
Child and Adolescent Mental Health
Credits: 3.00
In this course, students examine the psychological, social/environmental, cultural, and diagnostic aspects of children's mental health and mental illness. They explore areas of intervention and resilience. Upon successful completion of the course, students will be able to identify symptoms of children and adolescent's mental illness and identify current trends affecting practice in this area.

522-102
EDU: Techniques in Reading
Credits: 3.00
Students learn techniques to support reading development for all learners. Students learn techniques to promote phonological awareness, phonemic awareness, and phonics. Students also learn strategies to promote word analysis, vocabulary, and reading fluency skills. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro or achieve the required placement test score

522-102
EDU: Techniques in Reading
Credits: 3.00
Students learn techniques to support reading development for all learners. Students learn techniques to promote phonological awareness, phonemic awareness, and phonics. Students also learn strategies to promote word analysis, vocabulary, and reading fluency skills. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro or achieve the required placement test score

522-103
EDU: Introduction to Educational Practices
Credits: 3.00
This course addresses the fundamentals of teaching methodologies, learning styles, factors influencing teaching effectiveness, strategies to meet the needs of all learners, questioning techniques, and basic assessment practices.

522-103
EDU: Introduction to Educational Practices
Credits: 3.00
This course addresses the fundamentals of teaching methodologies, learning styles, factors influencing teaching effectiveness, strategies to meet the needs of all learners, questioning techniques, and basic assessment practices.

522-104
EDU: Technology/Media Resources
Credits: 3.00
This course provides the opportunity for the learner to develop the knowledge and skills in the area of media and computer resources as it relates to the instructional assistant. Students in this course will gain hands-on computer and media experience and will learn how to operate a variety of equipment. A variety of school-related documents will be prepared while using selected software. Students incorporate images into documents from a variety of sources, including digital cameras and scanners.

522-104
EDU: Technology/Media Resources
Credits: 3.00
This course provides the opportunity for the learner to develop the knowledge and skills in the area of media and computer resources as it relates to the instructional assistant. Students in this course will gain hands-on computer and media experience and will learn how to operate a variety of equipment. A variety of school related documents will be prepared while using selected software. Students incorporate images into documents from a variety of sources, including digital cameras and scanners.

522-105
EDU: Behavior Management
Credits: 3.00
Students evaluate models of behavior management, analyze social emotional learning, and explain the importance of proactive management techniques. In addition, students evaluate models of behavior management, analyze behavior and analyze the influence of Adverse Childhood Experiences on behavior in order to focus on developing skills to assist in empowering children to take an active role in self-control and classroom management.

522-106
EDU:Child and Adolescent Development
Credits: 3.00

This course provides an overview of growth and development from birth through adolescence. It acquaints the learner with the fundamental tasks of physical, motor, perceptual, cognitive, social/emotional, and language development.

522-107
EDU:Overview of Special Education
Credits: 3.00
Students examine a historical overview of special education and special education law including special education disability categories as defined by the Individuals with Disabilities Education Act (IDEA). Students explore state and federal qualification special education criteria and societal responses to students with disabilities. Students examine the impact of a student with disabilities on family dynamics and the role school personnel play in supporting students with disabilities.

522-112
EDU: Equity in Education
Credits: 3.00
Students analyze personal culture, explore cultural constructs, evaluate cultural bias in educational materials and analyze strategies to support English Learners. Students examine diversity in the classroom and develop techniques for supporting equity in the learning environment. In addition, students collaborate to identify service needs in the community and demonstrate professional collaboration skills through participating in a service learning project.

522-114
EDU: Techniques in Language Arts
Credits: 3.00
Students explore various genres of children's and young adult literature. Students examine techniques used to support learners in reading and writing and strategies for assessing learners in the process. Students examine techniques to support learners with reading and writing across the curriculum. PREREQUISITES: Complete course 522-102 - EDU: Techniques in Reading with a minimum grade of C Take 801-136 - English Composition 1

522-118
EDU: Techniques in Math
Credits: 3.00
This course will address techniques for the instructional assistant in assisting the classroom teacher in group and individual tutoring activities in math. Current practice. including manipulatives, problem solving, and assessment, will be covered within the framework of state and national standards. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course with a minimum grade C or TR

522-118
EDU: Techniques in Math
Credits: 3.00
This course will address techniques for the instructional assistant in assisting the classroom teacher in group and individual tutoring activities in math. Current practice. including manipulatives, problem solving, and assessment, will be covered within the framework of state and national standards. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course with a minimum grade C or TR

522-119
EDU: Techniques in Soc Stud
Credits: 3.00
Students analyze current content in social studies education as recommended by the National Council for the Social Studies and design learning opportunities for the five components of social studies: Geography. History. Culture and Society. Civics, Government, and Economics. Students explore factors that influence social studies instruction.

522-120
EDU: Techniques in Science
Credits: 3.00
This course is an introduction to the content and processes of science. Strategies of teaching science will be studied and practiced and will prepare you in assisting the classroom teacher in group and individual activities in science. Current science

processes, strategies, procedures, assessment options, and factors affecting science learning will be explored.

522-120
EDU: Techniques in Science
Credits: 3.00
This course is an introduction to the content and processes of science. Strategies of teaching science will be studied and practiced and will prepare you in assisting the classroom teacher in group and individual activities in science. Current science processes, strategies, procedures, assessment options, and factors affecting science learning will be explored.

522-124
EDU:Supporting Students with Disabilities
Credits: 3.00
Students identify research-based interventions for learners in categories defined by the Individuals with Disabilities Education Act (IDEA). Students interpret Individualized Educational Programs and examine special education related services available for learners. Students collect data to document student behavior and academic performance and recommend program adaptations and accommodations for students with disabilities while applying the concepts of least restrictive environment and inclusion.

522-129
EDU: Practicum 1
Credits: 3.00
Practicum I will introduce the student to a diverse classroom setting at an elementary, middle school and/or high school level. The student will observe children and practice techniques under the guidance of a DPI certified teacher.

522-129
EDU: Practicum 1
Credits: 3.00

Practicum I will introduce the student to a diverse classroom setting at an elementary, middle school and/or high school level. The student will observe children and practice techniques under the guidance of a DPI certified teacher.

522-131
EDU: Practicum 2
Credits: 3.00
Apply the skills learned in previous program courses in a school setting while under the supervision of a DPI certified teacher. Students support children with special education needs and programming. Job search skills will be addressed and a professional portfolio will be completed. PREREQUISITES: Take 522-114 - EDU: Techniques in Language Arts minimum grade C or TR Take 522-118 - EDU: Techniques in Math; Minimum Grade C,TR; Take 522-129 - EDU: Practicum 1; Minimum Grade C,TR;

522-131
EDU: Practicum 2
Credits: 3.00
Apply the skills learned in previous program courses in a school setting while under the supervision of a DPI certified teacher. Students support children with special education needs and programming. Job search skills will be addressed and a professional portfolio will be completed. PREREQUISITES: Take 522-114 - EDU: Techniques in Language Arts minimum grade C or TR Take 522-118 - EDU: Techniques in Math; Minimum Grade C,TR; Take 522-129 - EDU: Practicum 1; Minimum Grade C,TR;

524-108
PTA Musculoskeletal Anatomy & Function
Credits: 2.00
This course is a preparatory and enrichment elective for students who are about to enter first semester PTA program core courses. It provides an in-depth look at musculoskeletal anatomy, including anatomical terms, bony anatomy, cardinal planes and motions, and joint and muscle structure and function. PREREQUISITES: Course 806-177 - General Anatomy and Physiology

524-139
PTA Patient Interventions
Credits: 4.00
This course is an introduction to basic skills and physical therapy interventions performed by the physical therapist assistant.

524-140
PTA Professional Issues 1
Credits: 2.00
This course introduces the history and development of the physical therapy program, legal and ethical issues, the interdisciplinary health care team, and professional communication skills. This course is equivalent to 524-140 at other WTCS schools.

524-142
PTA Therapeutic Exercise
Credits: 3.00
This course provides instruction on the implementation of a variety of therapeutic exercise principles. Learners implement, educate, adapt, and assess responses to therapeutic exercises. PREREQUISITES: Course 806-177 - General Anatomy and Physiology with minimum grade C COREQUISITES: Course 524-156 - PTA Applied Kinesiology 1

524-143
PTA Biophysical Agents
Credits: 4.00
This course develops the knowledge and technical skills necessary to perform numerous therapeutic modalities likely to be utilized as a PTA. COREQUISITES: Take 524-139 - PTA Patient Interventions

524-144
PTA Principles of Neuromuscular Rehabilitation
Credits: 4.00
This course integrates concepts of neuromuscular pathologies, physical therapy interventions, and data collection in patient treatment. It is equivalent to 524-144 at other WTCS schools. PREREQUISITES: Complete courses 524-139 - PTA Patient

Interventions 524-142 - PTA Therapeutic Exercise 524-157 - PTA Applied Kinesiology 2 minimum grade C

524-145
PTA Musculoskeletal Rehabilitation
Credits: 4.00
This course integrates concepts of musculoskeletal pathologies, physical therapy interventions, and data collection in patient treatment. It is equivalent to 524-145 at other WTCS schools. PREREQUISITES: Course 524-139 - PTA Patient Interventions with minimum grade C COREQUISITES: Courses 524-142 - PTA Therapeutic Exercise and 524-157 - PTA Applied Kinesiology 2

524-146
PTA Management of Cardiopulmonary and Integumentary Conditions
Credits: 3.00
This course integrates concepts of cardiopulmonary and integumentary pathologies, physical therapy interventions, and data collection in patient treatment. It is equivalent to 524-146 at other WTCS schools. PREREQUISITES: Complete courses 524-139 - PTA Patient Interventions 524-142 - PTA Therapeutic Exercise 524-157 - PTA Applied Kinesiology 2 minimum grade C

524-147
PTA Clinical Practice 1
Credits: 2.00
This course provides a part-time clinical experience to apply foundational elements, knowledge, and technical skills pertinent to physical therapy practice. It is the equivalent of 524-147 at other WTCS schools. COREQUISITES: Courses 524-143 - PTA Biophysical Agents and 524-157 - PTA Applied Kinesiology 2

524-148
PTA Clinical Practice 2
Credits: 3.00
This course provides another part-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist

assistant in various practice settings. It is equivalent to 524-148 at other WTCS schools. PREREQUISITES: Course 524-147 - PTA Clinical Practice 1

524-149
PTA Rehabilitation Across the Lifespan
Credits: 2.00
This capstone course integrates concepts of pathology, physical therapy interventions, and data collection across the lifespan. In addition, the PTA's role in health, wellness and prevention, reintegration, and physical therapy interventions for special patient populations will be addressed. This course is equivalent to 524-149 at other WTCS schools. PREREQUISITES: Courses 524-144 - PTA Principles of Neuromuscular Rehabilitation, 524-145 - PTA Musculoskeletal Rehabilitation, and 524-148 - PTA Clinical Practice 2 COREQUISITES: Course 524-146 - PTA Management of Cardiopulmonary and Integumentary Conditions

524-150
PTA Professional Issues 2
Credits: 2.00
This course incorporates professional development, advanced legal and ethical issues, healthcare management and administration, and further development of professional communication strategies. PREREQUISITES: Course 524-140 - PTA Professional Issues 1 COREQUISITES: Course 524-148 - PTA Clinical Practice 2

524-151
PTA Clinical Practice 3
Credits: 5.00
This course provides a full-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist assistant in various practice settings. PREREQUISITES: Courses 524-144 - PTA Principles of Neuromuscular Rehabilitation, 524-145 - PTA Musculoskeletal Rehabilitation, 524-146 - PTA Management of Cardiopulmonary and Integumentary Conditions, and 524-148 - PTA Clinical Practice 2

524-156
PTA Applied Kinesiology 1
Credits: 4.00
Introduces basic principles of musculoskeletal anatomy, kinematics, and clinical assessment. Students locate and identify muscles, joints, and other landmarks of the lower quadrant in addition to assessing range of motion and strength.
PREREQUISITES: Course 801-136 - English Composition 1

524-157
PTA Applied Kinesiology 2
Credits: 3.00
Applies basic principles from PTA Kinesiology 1 to the axial skeleton and upper quadrant including location and identification of muscles, joints and other landmarks. Assess range of motion and strength of the axial skeleton and upper quadrant. Integrate analysis of posture and gait. PREREQUISITES: Course 524-156 - PTA Applied Kinesiology 1 with a minimum grade of C or TR

526-149
Radiographic Procedures 1
Credits: 5.00
This course prepares radiography students to perform routine radiologic procedures on various parts of the body, including the upper body, hip, pelvis, and ankle. Students apply knowledge of human anatomy to position the patient correctly to achieve the desired result. PREREQUISITES: Course 806-177 - General Anatomy and Physiology COREQUISITES: Take 526-158 - Introduction to Radiography Take 526-159 - Radiographic Imaging Take 526-168 - Radiography Clinical 1

526-158
Introduction to Radiography
Credits: 3.00
This course introduces students to the role of radiography in health care. Students apply legal and ethical considerations to patient care and pharmacology in the radiologic sciences. PREREQUISITES: Course 806-177 - General Anatomy and Physiology COREQUISITES: Courses 526-149 - Radiographic Procedures 1, 526-159 - Radiographic Imaging, and 526-158 - Introduction to Radiography

526-159
Radiographic Imaging
Credits: 3.00
This course introduces radiography students to the process of creating radiographic images. Students determine the factors that affect image quality, including contrast, density, and distortion. Students apply OSHA standards for health and safety in the darkroom. PREREQUISITES: Course 806-177 - General Anatomy and Physiology COREQUISITES: Courses 526-149 - Radiographic Procedures 1, 526-158 - Introduction to Radiography, and 526-168 - Radiography Clinical 1

526-168
Radiography Clinical 1
Credits: 2.00
This beginning level clinical course prepares radiography students to perform radiologic procedures on patients with extensive supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting. PREREQUISITES: Course 806-177 - General Anatomy and Physiology COREQUISITES: Courses 526-149 - Radiographic Procedures 1, 526-158 - Introduction to Radiography, and 526-159 - Radiographic Imaging

526-174
ARRT Certification Seminar
Credits: 2.00
Provides preparation for the national certification examination prepared by the American Registry of Radiologic Technologists. Emphasis is placed on the weak areas of the individual students. Simulated registry examinations are utilized. PREREQUISITES: Course 526-199 - Radiography Clinical 4 COREQUISITES: Courses 526-189 - Radiographic Pathology, 526-190 - Radiography Clinical 5, and 526-195 - Radiographic Image Analysis

526-189
Radiographic Pathology
Credits: 1.00

This course prepares radiography students to determine the basic radiographic manifestations of pathological conditions. Students classify trauma related to site, complications, and prognosis and locate the radiographic appearance of pathologies. PREREQUISITES: Course 526-199 - Radiography Clinical 4 COREQUISITES: Courses 526-174 - ARRT Certification Seminar, 526-190 - Radiography Clinical 5, 526-195 - Radiographic Image Analysis, and 526-197 - Radiation Protection and Biology

526-190
Radiography Clinical 5
Credits: 2.00
This fifth level clinical course prepares radiography students to perform radiologic procedures on patients with some supervision. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies. PREREQUISITES: Course 526-199 - Radiography Clinical 4 COREQUISITES: Courses 526-174 - ARRT Certification Seminar, 526-189 - Radiographic Pathology, 526-195 - Radiographic Image Analysis, and 526-197 - Radiation Protection and Biology

526-191
Radiographic Procedures 2
Credits: 5.00
This course prepares radiography students to perform routine radiologic procedures on various parts of the body, including the skull and spine. Students apply knowledge of human anatomy to position the patient correctly to achieve the desired result. PREREQUISITES: Courses 526-149 - Radiographic Procedures 1, 526-158 - Introduction to Radiography, 526-159 - Radiographic Imaging, 526-168 - Radiography Clinical 1 COREQUISITES: Courses 526-230 - Advanced Radiographic Imaging and 526-192 - Radiography Clinical 2

526-192
Radiography Clinical 2
Credits: 3.00
This second level clinical prepares radiography students to perform radiologic procedures on patients with extensive supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a

health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting. PREREQUISITES: Courses 526-149 - Radiographic Procedures 1, 526-158 - Introduction to Radiography, 526-159 - Radiographic Imaging, 526-168 - Radiography Clinical 1 COREQUISITES: Courses 526-230 - Advanced Radiographic Imaging and 526-191 - Radiographic Procedures 2

526-193
Radiography Clinical 3
Credits: 3.00
This third level clinical course prepares radiography students to perform radiologic procedures on patients with supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the demonstration of communication and critical thinking skills appropriate to the clinical setting. PREREQUISITES: Courses 526-230 - Advanced Radiographic Imaging, 526-191 - Radiographic Procedures 2, and 526-192 - Radiography Clinical 2

526-194
Imaging Equipment Operation
Credits: 3.00
This course introduces radiography to the principles and application of x-ray technology. Students analyze how x-rays are produced and determine the corrective actions necessary for common equipment malfunctions. PREREQUISITES: Course 526-193 - Radiography Clinical 3 COREQUISITES: Courses 526-231 - Imaging Modalities and 526-199 - Radiography Clinical 4

526-195
Radiographic Image Analysis
Credits: 2.00
This course prepares radiography students to analyze radiographic images for quality. Students apply quality control tests to determine the causes of image problems, including equipment malfunctions and procedural errors. PREREQUISITES: Course 526-199 - Radiography Clinical 4 COREQUISITES: Courses 526-174 - ARRT

Certification Seminar, 526-189 - Radiographic Pathology, 526-190 - Radiography Clinical 5, and 526-197 - Radiation Protection and Biology

526-197
Radiation Protection and Biology
Credits: 3.00
This course prepares radiography students to protect themselves and others from exposure to radioactivity. Students examine the characteristics of radiation and how radiation affects cell biology. Students apply standards and guidelines for radiation exposure. PREREQUISITES: Course 526-199 - Radiography Clinical 4 COREQUISITES: Courses 526-174 - ARRT Certification Seminar, 526-189 - Radiographic Pathology, 526-190 - Radiography Clinical 5, and 526-195 - Radiographic Image Analysis

526-198
Radiography Clinical 6
Credits: 2.00
This final clinical course requires students to integrate and apply all knowledge learned in previous courses to the production of high-quality radiographs in the clinical setting. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies. PREREQUISITES: Course 526-190 - Radiography Clinical 5

526-199
Radiography Clinical 4
Credits: 3.00
This fourth level clinical course prepares radiography students to perform radiologic procedures on patients with supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies. PREREQUISITES: Course 526-193 - Radiography Clinical 3 COREQUISITES: Courses 526-194 - Imaging Equipment Operation and 526-231 - Imaging Modalities

526-230
Advanced Radiographic Imaging
Credits: 2.00
This course prepares radiography students to apply advanced radiographic principles to the production of radiographic images. Students analyze exposure factor considerations, differentiate between film and exposure latitude, and use beam restricting devices. PREREQUISITES: Courses 526-149 - Radiographic Procedures 1, 526-159 - Radiographic Imaging, 526-159 - Radiographic Imaging, and 526-168 - Radiography Clinical 1 COREQUISITES: Courses 526-191 - Radiographic Procedures 2 and 526-192 - Radiography Clinical 2

526-231
Imaging Modalities
Credits: 2.00
This course introduces radiography students to other types of imaging, including ultrasound, MRI, mammography, and bone density scans. Students analyze the role of various imaging technologies in health care. PREREQUISITES: Take 526-193 - Radiography Clinical 3 COREQUISITES: Take 526-194 - Imaging Equipment Operation Take 526-199 - Radiography Clinical 4

527-503
Conventional Wastewater Treatment
Credits: 1.50
Covers the basic biology, chemistry and operational controls of wastewater treatment processes: pre- and primary treatment of wastewater, activated sludge, trickling filters and RBCs (Rotating Biological Contactors). The structure and function of major equipment is explained. Various lab tests and the calculations associated with them are presented.

527-505
Advanced Wastewater Treatment
Credits: 2.00
Develops competence in management of wastewater treatment processes including disinfection treatment of wastewater, basic and advanced phosphorus removal, tertiary filtration, mechanical sludge handling, sludge dewatering, and sludge disposal.

Students use the Internet to locate resources useful in managing wastewater treatment processes.

527-511
Water Chemistry
Credits: 2.00
Explores basic chemical concepts and principles such as elements, compounds, states of matter, and reactions that are applicable to evaluating and regulating water quality and applies them to water and wastewater treatment. Learners also examine laboratory techniques, equipment, quality assurance, and record keeping and reporting.

527-520
Hydraulics of Water & Wastewater
Credits: 1.50
Provides information and procedures necessary to predict and manipulate the hydraulics of water transmission and collection. The primary work assignments involve the reading and use of hydraulic principles and then applying them in a real-life case analysis as a laboratory project.

527-525
Industrial Wastes
Credits: 1.50
Focuses on the control of wastewater resulting from the processing of a variety of industrial materials. Methods of waste initiation, impact, minimization, and the treatment of waste process streams of metal, pulp and paper, and food and beverage industry operations are emphasized and analyzed.

527-530
Groundwater Supply & Distribution
Credits: 1.50
Provides environmental and treatment information necessary to operate a potable groundwater well system. Basic distribution system design and component use will also be detailed. Students examine a groundwater treatment plant and make operational assessments based on established industry criteria.

527-536
Equipment Maintenance & Instrumentation
Credits: 2.00
Develops skills in the identification and application of tools, correcting facility and system mechanical problems, and understanding the complete concept of preventative and predictive maintenance. Students will research preventative and predictive maintenance systems. Skills will be developed using instrumentation for process control. Supervisory Control and Data Acquisition including control diagrams, designs and applications will be studied.

531-100
EMR/EMT 1
Credits: 3.00
Prepares students to perform emergency medical care sanctioned by the Wisconsin Department of Health Services, EMS Section scope of practice for the EMR/EMT. Includes foundational knowledge and skill application for both EMR/ EMT in the following areas: the EMS system, EMR/EMT responsibilities, legal and ethical standards, patient movement techniques, pathophysiology, body systems and functions, patient assessment and treatment, pharmacology, shock and resuscitation, age-specific patient considerations, special medical considerations, medication administration, airway anatomy and management. Successful completion prepares the learner for Wisconsin EMR Certification and the National Registry EMR written examination. PREREQUISITES: Take OPTION-TEST; From rule CR531326;

531-101
EMT 2
Credits: 4.00
This curriculum prepares students to perform emergency medical care sanctioned by the Wisconsin Department of Health Services, EMS Section scope of practice for the Emergency Medical Technician (EMT). Includes foundational knowledge and skill application for EMT in the following areas: the EMS system, EMT responsibilities, legal and ethical standards, patient movement techniques, pathophysiology, body systems and functions, patient assessment and treatment, pharmacology, shock and

resuscitation, age-specific patient considerations, special medical considerations, medication administration, airway anatomy and management. Successful completion prepares the learner for the National Registry EMT written examination. PREREQUISITES: Take 531-100 - EMR/EMT 1 with a minimum grade of C Take OPTION-TEST; From rule CR531313;

531-103
Advanced EMT
Credits: 4.00
This curriculum expands the role and skills of the Emergency Medical Technician (EMT). Skills will include obtaining intravenous and intraosseous access, intranasal, intramuscular and subcutaneous medication administration, and fluid therapy. Extensive patient assessment knowledge and skills and treatment decision making skills are integrated throughout the curriculum. Successful completion prepares the learner for the National Registry AEMT written examination.

531-104
Advanced EMT - Clinical
Credits: 1.00
This course provides a WI licensed EMT holding a valid AEMT Training Center Training permit the opportunity to enhance learning through the practice of clinical, field, and high-fidelity simulation experiences under the supervision of instructors or approved preceptors. Successful completion of this course requires the student to meet all clinical/field competencies. This course runs concurrently with AEMT 30-531-103. COREQUISITES: Take 531-103 - Advanced EMT

531-312
EMR to EMT I
Credits: 2.00
In this course, learners build foundational skills and knowledge needed to become an Emergency Medical Technician (EMT) candidate, while also meeting all requirements for Emergency Medical Responder (EMR) candidates. The learner examines lifesaving topics including basic anatomy and physiology, patient assessment, traumatic injury management, airway management, cardiac management and basic medical care. Upon completion of the course, learners will be eligible to participate in the National Registry of EMT's Emergency Medical Responder exams required for Wisconsin EMR

certification. PREREQUISITES: Students must be accepted to program 30-531-3, Emergency Medical Technician, in order to register for this course.

531-313
EMR to EMT Part II
Credits: 3.00
In this course, learners build upon the base knowledge of the EMR/EMT Part 1 course. The learner examines lifesaving topics including expanded anatomy, physiology, and pathophysiology; disease processes; more complex patient assessment; and; critical thinking skills. In addition, learners may be able to apply additional skills allowed by the Wisconsin Department of Health Services/EMS Section Scope of Practice for EMT's. Upon completion of the course, learners will be eligible to participate in the National Registry of EMT's Emergency Medical Technician exam required for Wisconsin EMT certification. PREREQUISITES: Student must be accepted to program 30-531-3 Emergency Medical Technician to be eligible to register for this course. Complete course 531-312 - EMR to EMT I minimum grade C

531-327
Advanced EMT
Credits: 4.00
If you currently hold a State of Wisconsin licensure as an Emergency Medical Technician (EMT), you can pursue additional training in intravenous access, fluid and medication administration, clinical decision-making skills, and patient assessment at this advanced level. Upon completion of the didactic, lab, and clinical components of this program, the participant will be eligible for testing and credentialing through the National Registry of Emergency Medical Technicians®. PREREQUISITES: Students must be accepted to program 30-531-6, Advanced Emergency Medical Technician, in order to register for this course.

531-911
EMS Fundamental
Credits: 2.00
This course provides the paramedic student with comprehensive knowledge of EMS systems, safety, wellbeing, legal issues, and ethical issues, with the intended outcome of improving the health of EMS personnel, patients, and the community. The students

will obtain fundamental knowledge of public health principles and epidemiology as related to public health emergencies, health promotion, and illness/injury prevention. Introducing students to comprehensive anatomical and medical terminology and abbreviations will foster the development of effective written and oral communications with colleagues and other health care professionals. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score Student must be accepted to program 31-531-1 EMT-Paramedic, 10-531-1 Paramedic Technician, or 10-531-2 Fire Medic in order to register for thiscourse.

531-912
Paramedic Medical Principles
Credits: 4.00
This course addresses the complex depth of anatomy, physiology, and pathophysiology of major human systems while also introducing the paramedic students to the topics of shock, immunology, and bleeding. COREQUISITES: Course 531-911 - EMS Fundamental

531-913
Advanced Patient Assessment Principles
Credits: 3.00
This course teaches the paramedic student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. By utilizing a structured and organized assessment process with knowledge of anatomy, physiology, pathophysiology, life span development, and changes that occur to the human body with time, the students will learn to develop a list of differential diagnoses through clinical reasoning, along with the ability to modify the assessment as necessary to formulate a treatment plan for their patient. COREQUISITES: Course 531-911 - EMS Fundamental

531-914
Adv. Pre-Hospital Pharmacology
Credits: 3.00
This course provides the paramedic student with the comprehensive knowledge of pharmacology required to formulate and administer a pharmacological treatment plan

intended to mitigate emergencies and improve the overall health of the patient. COREQUISITES: Course 531-911 - EMS Fundamental

531-915
Paramedic Respiratory Mgt.
Credits: 2.00
This course teaches the paramedic student to integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages. Specific knowledge pertaining to the respiratory system is also provided to ensure the student is prepared to formulate a field impression and implement a comprehensive treatment plan for a patient with a respiratory complaint. COREQUISITES: Course 531-914 - Adv. Pre-Hospital Pharmacology

531-918
Adv. Emergency Resuscitation
Credits: 1.00
By teaching Advanced Cardiac Life Support ('ACLS') and Pediatric Advanced Life Support ('PALS') methodologies and protocols, this course prepares the paramedic student in the integration of comprehensive knowledge of causes and pathophysiology into the management of shock, respiratory failure, respiratory arrest, cardiac arrest, and peri-arrest states with an emphasis on early intervention to prevent respiratory and/or cardiac arrest if possible. COREQUISITES: Course 531-955 - Paramedic Cardiology 1

531-919
Paramedic Medical Emergencies
Credits: 4.00
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a medical complaint. COREQUISITES: Course 531-955 - Paramedic Cardiology 1

531-920
Paramedic Trauma
Credits: 3.00
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient. COREQUISITES: Course 531-955 - Paramedic Cardiology 1

531-921
Special Patient Populations
Credits: 3.00
This course teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for patients with special needs. Gynecological emergencies, along with special considerations in trauma are also included within this course. COREQUISITES: Course 531-955 - Paramedic Cardiology 1

531-922
EMS Operations
Credits: 1.00
This course provides the paramedic student with the knowledge of operational roles and responsibilities to ensure patient, public, and EMS personnel safety. COREQUISITES: Course 531-955 - Paramedic Cardiology 1

531-923
Paramedic Capstone
Credits: 1.00
This course provides the student with a final opportunity to incorporate their cognitive knowledge and psychomotor skills through labs and scenario-based practice and evaluations prior to taking the National Registry written and practical examinations. Technical skills attainment for each student will be compiled and/or documented within this course as required by the DHS-approved paramedic curriculum. COREQUISITES: Course 531-955 - Paramedic Cardiology 1

531-925
Paramedic Human Patient Simulation Lab
Credits: 4.00
This course reinforces student learning through the practice of paramedicine in a controlled environment utilizing high-fidelity patient simulators and realistic emergency response scenarios with support and guidance of instructors. The student will apply assessment knowledge and demonstrate paramedic level skills in a variety of emergency response scenarios and assessments. COREQUISITES: Take course 531-912 - Paramedic Medical Principles concurrent or previous

531-926
Paramedic Hospital Field
Credits: 1.00
This initial course provides the student with the foundation and opportunities to enhance his or her learning through the practice of paramedicine in both prehospital and health care environments with actual patient care experiences under the supervision of approved preceptors. COREQUISITES: Take course 531-912 - Paramedic Medical Principles current or previous

531-927
Paramedic Hospital Field II
Credits: 2.00
This course provides the student with the opportunity to enhance his or her learning through the practice of paramedicine in both prehospital and health care environments with actual patient care experiences under the supervision of approved preceptors. COREQUISITES: Course 531-955 - Paramedic Cardiology 1 is required

531-928
Paramedic Human Patient Simulation Lab I
Credits: 2.00
This course introduces student learning through the practice of paramedicine in a controlled environment utilizing high-fidelity patient simulators and realistic emergency response scenarios with support and guidance of instructors. The student will apply assessment knowledge and demonstrate paramedic level skills in a variety of emergency response scenarios and assessments. COREQUISITES: Take course 531-912 - Paramedic Medical Principles concurrent or previous

531-929
Paramedic Human Patient Sim Lab II
Credits: 2.00
This course continues to reinforce student learning through the practice of paramedicine in a controlled environment utilizing high-fidelity patient simulators and realistic emergency response scenarios with support and guidance of instructors. The student will apply assessment knowledge and demonstrate paramedic level skills in a variety of emergency response scenarios and assessments. PREREQUISITES: Take 531-928 - Paramedic Human Patient Simulation Lab I; Minimum Grade C
COREQUISITES: Take 531-955 - Paramedic Cardiology 1

531-955
Paramedic Cardiology 1
Credits: 2.00
This course will provide the student with the basic knowledge to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment for the patient with cardiovascular disease.
COREQUISITES: Course 531-915 - Paramedic Respiratory Mgt.

531-956
Paramedic Cardiology 2
Credits: 2.00
This course teaches the paramedic student knowledge and skills to integrate assessment findings with principles of cardiovascular anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a variety of cardiovascular complaints.
PREREQUISITES: Course 531-955 - Paramedic Cardiology 1 with a minimum grade of C or TR

533-100
Deafness/Intro to
Credits: 2.00

This course is an overview of topics impacting the Deaf/Hard of Hearing communities. It is designed to assist those interested in learning about this diverse population of people.

533-109
Deaf Culture in America
Credits: 3.00
This course will expose the students to Deaf culture since its beginnings in the United States. It will discuss famous Deaf Americans and how they have impacted the lives of Deaf and hearing people in America.

533-125
Special Education And, Introduction to Deafness
Credits: 3.00
This course is an introduction to the educational process involving a deaf/hard of hearing child and a focus on deafness and how it impacts other aspects of disability.

533-126
American Sign Language 1
Credits: 2.00
This course is the first in a series of 4 courses. It is designed for students with no or minimal sign language experience. The course will help students develop the skills and knowledge needed to communicate in American Sign Language (ASL). The student will be introduced to the visual language used by the Deaf Community in North America. The student will be exposed to an introduction to receptive and expressive ASL vocabulary, grammatical structures, finger spelling, numbers, conversational behavior and Non-Manual Signals.

533-127
American Sign Language 2
Credits: 2.00
This course is the second in a series of 4. The student will develop the skills and knowledge needed to communicate in American Sign Language (ASL). This course is for students who have successfully completed ASL 1. The students will focus on the cultural behaviors and practices distinct to those that approach the world from a visual

perspective. Students will further explore receptive and expressive ASL vocabulary, grammatical structures, finger spelling, numbers, conversational behaviors and Non-Manual Signals. PREREQUISITES: Course 533-126 - American Sign Language 1

533-128
American Sign Language 3
Credits: 2.00
This course is the third in a series of 4 courses designed to enhance the skills and knowledge needed to communicate in American Sign Language (ASL). This course is for students who have successfully completed ASL 2. The course focuses on the cultural behaviors and practices distinct to those that approach the world from a visual perspective. The course begins to implement the skills acquired in ASL 1 & 2. It will cover more complex grammatical topics including temporal aspects, sequencing, conditionals, an introduction to conversational regulators, complex dialogue, storytelling and multiple meaning English terms with ASL equivalents. PREREQUISITES: Course 533-127 - American Sign Language 2

533-129
ASL 4
Credits: 2.00
This course is the last in a series of 4 courses designed to advance the skills and knowledge needed to communicate in American Sign Language (ASL). This course is for students who have successfully completed ASL 3. The course focuses on the cultural behaviors and practices distinct to those that approach the world from a visual perspective. This course will integrate the skills acquired in ASL 1, 2, & 3. It will expand the use of conversational regulators and include an introduction to English idioms with ASL equivalents. These additional skills will enable students to convey information and ideas about linguistic, cultural and social issues, in dialogues and narratives. PREREQUISITES: Course 533-128 - American Sign Language 3

533-130
Intro to Deaf History
Credits: 2.00
This course will cover various aspects of the deaf community including culture, history, and the technology used within the community. This course is ideal for those planning to work within a service occupation, education, or a health-related field.

533-131
ASL for Native Signers
Credits: 2.00
This course is for individuals who have grown up using sign language to communicate with family members. It will cover several linguistic aspects of ASL, historical influences, and cultural implications of being a hearing member of the deaf community.

543-101
Nursing Fundamentals
Credits: 2.00
This course focuses on basic nursing concepts that the beginning nurse will need to provide care to diverse patient populations. Current and historical issues impacting nursing will be explored within the scope of nursing practice. The nursing process will be introduced as a framework for organizing the care of patients with alterations in cognition, elimination, comfort, grief/loss, mobility, integument, and fluid/ electrolyte balance. PREREQUISITES: Students must be accepted to program 10-543-1, Nursing Associate Degree, to be eligible to register for this course. Course 806-177 - General Anatomy and Physiology with a minimum grade of B- COREQUISITES: Course 801-136 - English Composition 1

543-102
Nursing Skills
Credits: 3.00
This course focuses on development of clinical skills and physical assessment across the lifespan. Content includes mathematic calculations and conversions related to clinical skills, blood pressure assessment, aseptic technique, wound care, oxygen administration, tracheostomy care, suctioning, management of enteral tubes, basic medication administration, glucose testing, enemas, ostomy care, and catheterization. In addition, the course includes techniques related to obtaining a health history and basic physical assessment skills using a body systems approach. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Course 806-177 - General Anatomy and Physiology with a minimum grade of B- COREQUISITES: Take 543-101 - Nursing Fundamentals

543-103
Nursing Pharmacology
Credits: 2.00
This course introduces the principles of pharmacology, including drug classification and their effects on the body. Emphasis is on the use of the components of the nursing process when administering medication. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Course 806-177 - General Anatomy and Physiology with a minimum grade of B- COREQUISITES: Take 543-101 - Nursing Fundamentals Take 543-102 - Nursing Skills

543-104
Nsg: Intro Clinical Practice
Credits: 2.00
This introductory clinical course emphasizes basic nursing skills and application of the nursing process in meeting the needs of diverse clients. Emphasis is placed on performing basic nursing skills, the formulation of nurse-client relationships, communication, data collection, documentation, and medication administration. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Course 806-177 - General Anatomy and Physiology with a minimum grade of B- COREQUISITES: Complete 543-101 - Nursing Fundamentals Complete 543-102 - Nursing Skills Complete 543-103 - Nursing Pharmacology

543-105
Nursing Health Alterations
Credits: 3.00
This course elaborates upon the basic concepts of health and illness as presented in Nursing Fundamentals. It applies theories of nursing in the care of clients through the lifespan, utilizing problem solving and critical thinking. This course will provide an opportunity to study conditions affecting different body systems and apply therapeutic nursing interventions. It will also introduce concepts of leadership, team building, and scope of practice. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete 543-101 - Nursing Fundamentals with a minimum grade of C or TR Complete 543-102 - Nursing Skills with a minimum grade of C or TR Complete 543-103 - Nursing Pharmacology with a minimum grade of C or TR Complete 543-104 - Nsg: Intro Clinical Practice with a minimum grade of C or TR Complete course 801-136 - English Composition 1

COREQUISITES: Take 543-106 - Nursing Health Promotion Take 543-107 - Nursing: Clinical Care Across the Lifespan

543-106
Nursing Health Promotion
Credits: 3.00
This course will cover topics related to health promotion in the context of the family. We will cover nursing care of the developing family, which includes reproductive issues, pregnancy, labor and delivery, post-partum, the newborn, and the child. Recognizing the spectrum of healthy families, we will discern patterns associated with adaptive and maladaptive behaviors, applying mental health principles. An emphasis is placed on teaching and supporting healthy lifestyle choices. Nutrition, exercise, stress management, empowerment, and risk reduction practices are highlighted. Study of the family will cover dynamics, functions, discipline styles, and stages of development. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete 809-188 - Psychology, Developmental Complete 543-101 - Nursing Fundamentals with a minimum grade of C or TR Complete 543-102 - Nursing Skills with a minimum grade of C or TR Complete 543-103 - Nursing Pharmacology with a minimum grade of C or TR Complete 543-104 - Nsg: Intro Clinical Practice with a minimum grade of C or TR Complete course 801-136 - English Composition 1

543-107
Nursing: Clinical Care Across the Lifespan
Credits: 2.00
This clinical experience applies nursing concepts and therapeutic interventions to clients across the lifespan. It also provides an introduction to concepts of teaching and learning. Extending care to include the family is emphasized. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete 543-101 - Nursing Fundamentals Complete 543-102 - Nursing Skills Complete 543-103 - Nursing Pharmacology Complete 543-104 - Nsg: Intro Clinical Practice COREQUISITES: Complete 543-106 - Nursing Health Promotion

543-108
Nursing: Introduction to Clinical Care Management
Credits: 2.00
This clinical experience applies nursing concepts and therapeutic nursing interventions to groups of clients. It also provides an introduction to leadership, management, and team building. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete 543-101 - Nursing Fundamentals Complete 543-102 - Nursing Skills Complete 543-103 - Nursing Pharmacology Complete 543-104 - Nsg: Intro Clinical Practice COREQUISITES: Take 543-105 - Nursing Health Alterations Take 543-106 - Nursing Health Promotion Take 543-107 - Nursing: Clinical Care Across the Lifesp Complete 543-105 - Nursing Health Alterations

543-109
Nursing Complex Health Alterations I
Credits: 3.00
Complex Health Alterations I prepares the learner to expand knowledge from previous courses in caring for clients with alterations in musculoskeletal, cardiovascular, respiratory, endocrine, and hematologic systems, as well as clients with fluid/electrolyte and acid-base imbalances and alterations in comfort. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete course 543-105 - Nursing Health Alterations minimum grade C or TR Complete course 543-106 - Nursing Health Promotion minimum grade C or TR Complete course 543-107 - Nursing: Clinical Care Across the Lifesp minimum grade C or TR Complete course 543-108 - Nursing: Introduction to Clinical Care Management minimum grade C or TR Complete course 806-179 - Anatomy and Physiology, Advanced minimum grade B- COREQUISITES: Complete course 806-197 - Microbiology

543-110
Nursing Mental Health Community Concepts
Credits: 2.00
This course will cover topics related to the delivery of community and mental health care. Specific health needs of individuals, families, and groups will be addressed. Attention will be given to diverse and at-risk populations. Mental health concepts will concentrate on adaptive/ maladaptive behaviors and specific mental health disorders. Community resources will be examined in relation to specific types of support offered

to racial, ethnic, economically diverse individuals and groups. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete 543-105 - Nursing Health Alterations minimum grade C or TR Complete 543-106 - Nursing Health Promotion minimum grade C or TR Complete 543-107 - Nursing: Clinical Care Across the Lifespan Minimum grade C or TR Complete 543-108 - Nursing: Introduction to Clinical Care Management minimum grade C or TR Complete 806-179 - Anatomy and Physiology, Advanced minimum grade B- COREQUISITES: Take 543-109 - Nursing Complex Health Alterations I Take 543-112 - Nursing Advanced Skills Complete 809-198 - Psychology, Introduction to

543-111
Nursing Intermediate Clinical Practice
Credits: 3.00
This intermediate level clinical course develops the RN role when working with clients with complex health care needs. A focus of the course is developing skills needed for managing multiple clients and priorities. Using the nursing process, students will gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete 543-105 - Nursing Health Alterations minimum grade C or TR Complete 543-106 - Nursing Health Promotion minimum grade C or TR Complete 543-107 - Nursing: Clinical Care Across the Lifespan minimum grade C or TR Complete 543-108 - Nursing: Introduction to Clinical Care Management minimum grade C or TR COREQUISITES: Complete 543-109 - Nursing Complex Health Alterations I Complete 543-110 - Nursing Mental Health Community Concepts Complete 543-112 - Nursing Advanced Skills

543-112
Nursing Advanced Skills
Credits: 1.00
This course focuses on the development of advanced clinical skills. Content includes advanced IV skills, blood product administration, chest tube systems, basic EKG interpretation, and nasogastric/feeding tube insertion. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete 543-105 - Nursing Health Alterations minimum grade C or TR Complete 543-106 - Nursing Health Promotion minimum grade C or TR Complete 543-107 - Nursing: Clinical Care Across the Lifespan minimum grade C or TR Complete

543-108 - Nursing: Introduction to Clinical Care Management minimum grade C or TR Complete 806-179 - Anatomy and Physiology, Advanced minimum grade B- COREQUISITES: Take 543-109 - Nursing Complex Health Alterations I

543-113
Nursing Complex Health Alterations II
Credits: 3.00
Complex Health Alterations II prepares the learner to expand knowledge and skills from previous courses in caring for clients with alterations in the immune, neuro-sensory, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary, and reproductive systems. The learning will also focus on management of care for clients with high risk perinatal conditions, high risk newborns, and the ill child. Synthesis and application of previously learned concepts will be evident in the management of clients with critical/life threatening situations. PREREQUISITES: Students must be accepted to program 10-543-1 Practical Nursing, to be eligible to register for this course. Complete 543-109 - Nursing Complex Health Alterations I minimum grade C or TR Complete 543-110 - Nursing Mental Health Community Concepts minimum grade C or TR Complete 543-111 - Nursing Intermediate Clinical Practice minimum grade C or TR Complete 543-112 - Nursing Advanced Skills minimum grade C or TR Complete 806-197 - Microbiology minimum grade C or TR

543-114
Nursing Management and Professional Concepts
Credits: 2.00
This course covers nursing management and professional issues related to the role of the RN. Emphasis is placed on preparing for the RN practice. PREREQUISITES: Students must be accepted to program 10-543-1 Practical Nursing, to be eligible to register for this course. Complete 543-109 - Nursing Complex Health Alterations I minimum grade C or TR Complete 543-110 - Nursing Mental Health Community Concepts minimum grade C or TR Complete 543-111 - Nursing Intermediate Clinical Practice minimum grade C or TR Complete 543-112 - Nursing Advanced Skills minimum grade C or TR

543-115
Nursing Advanced Clinical Practice
Credits: 3.00

This advanced clinical course requires the student to integrate concepts from all previous courses in the management of groups of clients facing complex health alterations. Students will have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Continuity of care through interdisciplinary collaboration is emphasized. PREREQUISITES: Students must be accepted to program 10-543-1 Nursing Associate Degree to be eligible to register for this course. Complete course 543-109 - Nursing Complex Health Alterations I minimum grade C or TR Complete course 543-110 - Nursing Mental Health Community Concepts minimum grade C or TR Complete course 543-111 - Nursing Intermediate Clinical Practice minimum grade C or TR Complete course 543-112 - Nursing Advanced Skills minimum grade C or TR COREQUISITES: Complete course 543-113 - Nursing Complex Health Alterations II Complete course 543-114 - Nursing Management and Professional Concepts

543-116
Nursing Clinical Transition
Credits: 2.00
This clinical experience prepares the student to assume the role of graduate nurse. The course promotes clinical decision-making, delegation, and collaboration to achieve client and organizational outcomes. Continued professional development is fostered. PREREQUISITES: Students must be accepted to program 10-543-1 Practical Nursing, to be eligible to register for this course. Complete course 543-109 - Nursing Complex Health Alterations I minimum grade C or TR Complete course 543-110 - Nursing Mental Health Community Concepts minimum grade C or TR Complete course 543-111 - Nursing Intermediate Clinical Practice minimum grade C or TR Complete course 543-112 - Nursing Advanced Skills minimum grade C or TR COREQUISITES: Complete course 543-113 - Nursing Complex Health Alterations II Complete course 543-114 - Nursing Management and Professional Concepts; Complete course 543-115 - Nursing Advanced Clinical Practice

543-122
Simulation for Healthcare Educators
Credits: 3.00
This course prepares educators to integrate human patient simulation into the classroom. Students will learn about the history, evolution, and educational theories of simulation. They will be introduced to modalities of simulation that can be used in healthcare programs to reinforce critical thinking skills in health occupations students

in a safe environment. The course will include creation of high fidelity simulations, standardized patient scenarios, and have the opportunity to implement them. Explore concepts including evaluation, debriefing, and future research in simulation. The goal of the course is to promote excellence in simulation education.

543-123
Milit Med Fundamental and Pharm Appl
Credits: 2.00
This course focuses on the integration of basic nursing fundamentals and pharmacology nursing concepts to provide evidenced-based care to diverse patient populations across the lifespan. Emphasis is on the use of the components of the nursing process when administering medications.

543-124
Milit Med Skills Theory and Simulation
Credits: 2.00
This course provides students with the opportunity while using simulation to demonstrate and perform skills commonly delegated to and within the scope of practice of the Licensed Practical Nurse (LPN) including collecting data and reporting patient responses relative to designated skills; skills include but are not limited to; utilization of the nursing process in collaboration with other health care team members and patient/families to address health care needs of individuals/families across the lifespan; communication both verbal and written; the use of information technology; drug calculation and administration of medications within the LPN scope of practice.

543-125
Trans; Mili Med to Nursing Profession
Credits: 1.00
This course is designed to facilitate the transition of military health care veterans into the Professional nurse role. Topics include: introduction to the healthcare delivery system, nursing roles within the healthcare delivery system, communication and collaboration with other members of the health care team. In addition to the exploration of the nursing process, documentation, safety, legal, ethical issues and information technology. The patient-needs framework of the curriculum and nursing process will be explored.

543-126
Application of Complex Nursing Concepts
Credits: 2.00
This course will prepare the learner, through the application of simulation, to provide care across the lifespan to complex patients with alterations in the cardiovascular, respiratory, endocrine, and hematologic systems, as well as patients with fluid/electrolyte and acid base imbalances, and pain. PREREQUISITES: Complete course 543-109 - Nursing Complex Health Alterations I

543-199
Clinical Reasoning in Nursing
Credits: 3.00
This course introduces basic concepts of critical thinking to the nursing student. Identification of critical thinking skills and common characteristics related to these skills will be applied to the nursing process. The goal of this course is to enhance clinical reasoning skills through application and practice in human patient simulation. Students will gain skills in critical thinking to use in everyday life as well as their academic and nursing career. PREREQUISITES: Course 543-101 - Nursing Fundamentals with a minimum grade of C or TR

543-199
Clinical Reasoning in Nursing
Credits: 3.00
This course introduces basic concepts of critical thinking to the nursing student. Identification of critical thinking skills and common characteristics related to these skills will be applied to the nursing process. The goal of this course is to enhance clinical reasoning skills through application and practice in human patient simulation. Students will gain skills in critical thinking to use in everyday life as well as their academic and nursing career. PREREQUISITES: Course 543-101 - Nursing Fundamentals with a minimum grade of C or TR

543-300
Nursing Assistant
Credits: 2.00

The Nursing Assistant program prepares students for employment as nursing assistants. The program also prepares students for other health-related programs. During the 75-hour course, students will be required to demonstrate the following skills under the supervision of a licensed nurse: communication, basic nursing assistant and personal care skills, attention to client's rights, and care of clients with dementia. The program is recognized by the Wisconsin Department of Health Services as a nurse-aide training program. Upon successful completion of the program, the student is eligible to take the Wisconsin Nursing Assistant competency evaluation for inclusion on the Wisconsin Nurse Aide Registry and employment in nursing homes, hospitals, home health agencies, hospices, CBRF's, assisted living centers and homes for the developmentally disabled. PREREQUISITES: Students must be accepted to program 30-543-1, Nursing Assistant, or to the certificate 90-543-6, Nursing Assistant to be eligible to register for this course.

543-301
Nursing Fundamentals
Credits: 2.00
This course focuses on basic nursing concepts to provide evidence-based care to diverse patient populations across the lifespan. Current and historical issues impacting nursing will be explored within the scope of nursing practice. The nursing process will be introduced as a framework for organizing the care of patients. PREREQUISITES: Students must be accepted to program 31-543-1, Practical Nursing to be eligible to register for this course. Take 806-177 - General Anatomy and Physiology; Minimum Grade B- COREQUISITES: Take 801-136 - English Composition 1;

543-302
Nursing Skills
Credits: 3.00
This course focuses on the development of evidence-based clinical skills and physical assessment across the lifespan. Content includes mathematical calculations and conversions related to clinical skills. In addition, the course includes techniques related to obtaining a health history and basic physical assessment skills using a body systems approach. PREREQUISITES: Students must be accepted to program 31-543-1 Practical Nursing, to be eligible to register for this course. Take 806-177 -

General Anatomy and Physiology; Minimum Grade B- COREQUISITES: Take 543-301 - Nursing Fundamentals

543-303
Nursing Pharmacology
Credits: 2.00
This course introduces the principles of pharmacology, including drug classifications and their effects on the body. Emphasis is on the use of the components of the nursing process when administering medications. PREREQUISITES: Students must be accepted to program 31-543-1 Practical Nursing to be eligible to register for this course. Take 806-177 - General Anatomy and Physiology; Minimum Grade B- COREQUISITES: Take 543-301 - Nursing Fundamentals Take 543-302 - Nursing Skills

543-304
Nursing: Intro to Clinical Practice
Credits: 2.00
This introductory clinical course emphasizes basic nursing skills and application of the nursing process in meeting the needs of diverse clients across the lifespan. Emphasis is placed on performing basic nursing skills, the formation of nurse-client relationships, communication, data collection, documentation, and medication administration. PREREQUISITES: Students must be accepted to program 31-543-1 Practical Nursing to be eligible to register for this course. Take 806-177 - General Anatomy and Physiology; Minimum Grade B- COREQUISITES: Take 543-301 - Nursing Fundamentals Take 543-302 - Nursing Skills Take 543-303 - Nursing Pharmacology

543-305
Nursing Health Alterations
Credits: 3.00
This course elaborates upon the basic concepts of health and illness as presented in Nursing Fundamentals. It applies theories of nursing in the care of patients through the lifespan, utilizing problem solving and critical thinking. This course will provide an opportunity to study conditions affecting different body systems and apply evidence-based nursing interventions. It will also introduce concepts of leadership and management. PREREQUISITES: Students must be accepted to program 31-543-1 Practical Nursing to be eligible to register for this course. Take 543-301 - Nursing Fundamentals; Minimum Grade C Take 543-302 - Nursing Skills; Minimum Grade C

Take 543-303 - Nursing Pharmacology; Minimum Grade C Take 543-304 - Nursing: Intro to Clinical Practice; Minimum Grade C Complete course 801-136 - English Composition 1; COREQUISITES: Take 543-306 - Nursing Health Promotion Take 543-307 - Nursing: Clinical Care Across Lifespan

543-306
Nursing Health Promotion
Credits: 3.00
This course focuses on topics related to health promotion for individuals and families throughout their lifespan. We will cover nursing care of the developing family, which includes reproductive issues, pregnancy, labor and delivery, post-partum, the newborn, and the child. Recognizing the spectrum of healthy families we will discern patterns associated with adaptive and maladaptive behaviors applying mental health principles. An emphasis is placed on teaching and supporting healthy lifestyle choices for individuals of all ages. Nutrition, exercise, stress management, empowerment, and risk reduction practices are highlighted. Study of the family will cover dynamics, functions, discipline styles, and stages of development. PREREQUISITES: Students must be accepted to program 31-543-1 Practical Nursing to be eligible to register for this course. Take 543-301 - Nursing Fundamentals; Minimum Grade C Take 543-302 - Nursing Skills; Minimum Grade C Take 543-303 - Nursing Pharmacology; Minimum Grade C Take 543-304 - Nursing: Intro to Clinical Practice; Minimum Grade C Take 809-188 - Psychology, Developmental; Complete course 801-136 - English Composition 1;

543-307
Nursing: Clinical Care Across Lifespan
Credits: 2.00
This clinical experience applies nursing concepts and therapeutic interventions to patients across the lifespan. It also provides an introduction to concepts of teaching and learning. Extending care to include the family is emphasized. PREREQUISITES: Students must be accepted to program 31-543-1 Practical Nursing to be eligible to register for this course. Take 809-188 - Psychology, Developmental Take 801-136 - English Composition 1 Take 543-301 - Nursing Fundamentals; Minimum Grade C Take 543-302 - Nursing Skills; Minimum Grade C Take 543-303 - Nursing Pharmacology;

Minimum Grade C Take 543-304 - Nursing: Intro to Clinical Practice; Minimum Grade C COREQUISITES: Take 543-306 - Nursing Health Promotion

543-308
Nursing: Intro Clinical Care Management
Credits: 2.00
This clinical experience applies nursing concepts and therapeutic nursing interventions to groups of patients across the lifespan. It also provides an introduction to leadership, management, and team building. PREREQUISITES: Students must be accepted to program 31-543-1 Practical Nursing to be eligible to register for this course. Take 543-301 - Nursing Fundamentals; Minimum Grade C Take 543-302 - Nursing Skills; Minimum Grade C Take 543-303 - Nursing Pharmacology; Minimum Grade C Take 543-304 - Nursing: Intro to Clinical Practice; Minimum Grade C COREQUISITES: Take 543-306 - Nursing Health Promotion Take 543-307 - Nursing: Clinical Care Across Lifespan Take 543-305 - Nursing Health Alterations

550-130
Alcohol/Drug Abuse Rehabilitation
Credits: 3.00
In this course, students explore substance abuse disorders. They examine the assessment, counseling, and case management of substance abuse disorders. Upon successful completion of the course, students will be able to explain the role of the human service worker in AODA Rehabilitation.

550-154
Family and Chemical Abuse
Credits: 3.00
A comprehensive study of the problems associated with chemical abuse within the family. Course focus is on the psychological and physiological trauma as well as methods of motivation toward recovery.

550-156
Mental Health/Substance Abuse
Credits: 3.00

In this course, students explore the interaction between mental illness and substance abuse. They examine how this interaction can lead to the development of co-occurring disorder(s) and identify strategies to assess, diagnose, and treat co-occurring disorders. Upon completion of the course, students will be able to explain the unique treatment needs of people who have a coexisting mental health and substance abuse problem.

550-207
Psychopharmacology
Credits: 3.00
This course is designed to provide an overview of the psychopharmacology of therapeutic drugs, over-the-counter drugs, illicit drugs, alcohol, nicotine and caffeine. Emphasis will be on the nervous system structure, brain function, site of action theory and on comprehending the effects of substances on these systems. Interactions, withdrawal, maternal and fetal effects will be addressed, as well as terminology and drug regulations.

601-110
Air Conditioning Fundamentals
Credits: 3.00
Topics covered include air conditioning principles and terms, physical principles of air movement and humidity, methods of conditioning air for comfort and health, the proper use of psychrometers, dry bulb thermometers, hygrometers, pilot tubes, recorders, manometers and barometers and the reading and interpretation of psychometric charts and scales. COREQUISITES: Take 601-116 - Mechanical Fundamentals

601-112
Environmental Systems
Credits: 2.00
This course will introduce the student to the maintenance and repair of HVAC/R equipment encountered in the workplace. Basic theory of heating, air conditioning, and refrigeration will be covered; emphasis will be placed on preventative maintenance. The student will apply theory in lab exercises demonstrating competency with general repair and the use of temperature and electrical meters, recording data, and performing adjustments to keep equipment at peak efficiency. COREQUISITES: Complete course 801-301 - Writing Principles

601-114
Power Plant Operating Engineer
Credits: 4.00
This lecture/lab format course will introduce the student to the fundamentals of obtaining the Power Plant Operating Engineer 3rd Class certification. Topics will include heat energy transfer, steam generators, boiler construction, and codes and fuel firing. PREREQUISITES: Course 601-117

601-116
Mechanical Fundamentals
Credits: 3.00
Topics covered include learning the various types of piping and tubing used in air conditioning and refrigeration, types of fittings, bending, brazing and soft soldering tubing, black iron pipe work, sheet metal fundamentals, using hand tools, and the recognition and practice of safety procedures while working on air conditioning and refrigeration systems.

601-121
Heating Systems
Credits: 3.00
Topics in this course include introduction to heat principles, temperature measurement, fuels and other sources of heat, combustion, basic heating systems, basic furnace design, gas furnace design and operation, venting of furnaces, chimney or exhaust gases and system controls. PREREQUISITES: Course 601-110 - Air Conditioning Fundamentals

601-122
Building Performance Instrument Cert
Credits: 3.00
This course will focus on certification based activities utilizing BPI equipment will provide the participant with the skills needed to correctly analyze HVAC & R equipment, assess indoor air quality and perform correct combustion set up and analysis. PREREQUISITES: Course 601-121 - Heating Systems with a minimum grade of C or TR

601-128
Electrical Controls and Systems
Credits: 3.00
Topics in this course include basic electricity review, control circuits, three phase motors, single phase motors, solid state devices, control components and troubleshooting using control schematics and solid state controls. PREREQUISITES: Complete course 601-304 - Electricity and Electronics for HVAC COREQUISITES: Complete course 804-370 - Mathematics I/Applied

601-129
HVAC Systems
Credits: 3.00
Topics include the installation and proper startup procedures of residential HVAC systems. Areas covered will be the installation of forced air heating equipment with a focus on the sheet metal, gas piping, venting and electrical hookups necessary to meet all code requirements. Also covered will be the installation of refrigerant lines, evaporator coils, and placement of the condensing unit. Students will leak check, evacuate and perform startup checks verifying superheat, subcooling, airflow and other vital parameters. PREREQUISITES: Take 601-110 - Air Conditioning Fundamentals Take 601-116 - Mechanical Fundamentals

601-131
Heating Systems Applications
Credits: 3.00
Topics include installation and service of heating and humidifying systems, including steam and hydronic heat distribution systems, heat pumps and complete air conditioning systems and heat recovery systems. PREREQUISITES: Course 601-121 - Heating Systems

601-133
Refrigeration Fundamentals
Credits: 3.00
Topics include refrigeration principles and terms, thermodynamic processes, refrigerants, vapor compression cycles, mechanical refrigeration system components,

use of electrical controls, refrigeration applications and refrigeration tools and materials. PREREQUISITES: Take 601-110 - Air Conditioning Fundamentals Take 601-116 - Mechanical Fundamentals

601-143
Refrigeration Applications
Credits: 3.00
Topics include commercial refrigeration systems, applications, installation, servicing, troubleshooting, heat loads and piping, absorption systems and special refrigeration systems. PREREQUISITES: Take 601-110 - Air Conditioning Fundamentals Take 601-116 - Mechanical Fundamentals Take 601-133 - Refrigeration Fundamentals

601-145
Electronic Energy Management
Credits: 3.00
Topics include an introduction to the role of computers in the heating, ventilation and air conditioning industry, microcomputer systems and applications, programming and direct digital control (DDC). COREQUISITES: Complete course 601-147 - Control Circuit Applications

601-147
Control Circuit Applications
Credits: 3.00
Topics include an introduction to control circuit terminology, measuring devices and control systems. The principles of self-contained, pneumatic and electronic-electric controls are examined and applied to control systems operation and design. PREREQUISITES: Complete course 601-128 - Electrical Controls and Systems and complete course 804-370 - Mathematics I/Applied with a minimum grade C or TR

601-149
Heat Load Estimation
Credits: 2.00
This course will teach how to use Manual J from ACCA. Students will develop the skills to do residential heating and cooling heat loads. Students will calculate not only heat loss but also losses or gains due to infiltration, sun loads, etc. Students will do

calculations on actual buildings in both long hand and using Right J, the computer software for Manual J. Students will also be responsible for developing recommendations for lowering heat loss by pricing energy upgrades such as insulation, window improvement, etc., and calculating payback and fuel savings.

601-156
Manual D Duct Design
Credits: 2.00
The student will use Manual D from ACCA to design ductwork to meet static and velocity requirements. The student will learn to calculate run lengths, pressure drop through fittings, and system components for supply and return ductwork.

601-176
Codes I
Credits: 2.00
This advanced level course will assist workers in understanding and following the National Fuel Gas Code.

601-304
Electricity and Electronics for HVAC
Credits: 3.00
In this course, students explore electrical principles and theory. Using standard testing equipment, students measure and troubleshoot equipment. Students practice wiring and installing a variety of electrical devices and systems. Upon completion of the course, students will be able to install, troubleshoot, and repair electrical components of air-conditioning, heating, and refrigeration systems. PREREQUISITES: This course is part of a priority placement program and registration is limited to program students with Core-Active status, new program students with priority placement authorization, and students in non priority placement programs that also require this class. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

601-305
Facility Operating Engineer LP
Credits: 3.00
In this course, students relate the principles of thermodynamics to the function of boilers. They investigate boiler types and classifications. Students examine fuels, rating and efficiency, firing methods, safety, and preventative maintenance. Upon completion of the course, students will be prepared to take the examination for the Facility Operating Engineer 3rd Class license. PREREQUISITES: This course is part of a priority placement program and registration is limited to program students with Core-Active status, new program students with priority placement authorization, and students in non priority placement programs that also require this class. If there are seats available during the 14 days prior to the start of the course, students outside these groups can connect with an academic advisor for authorization. For more information, visit gtc.edu/priority-placement or contact Academic Advising at academicadvising@gtc.edu.

602-104
Brake Systems
Credits: 3.00
This automotive course focuses on developing the skills needed to diagnose, service and repair vehicle braking systems with an introduction to ABS. (ABS diagnosis, service and repair will be addressed in the Advanced Chassis course.) PREREQUISITES: Take 602-107 - Auto Service Fundamentals Take 602-130 - Auto Shop Essentials OR 602-122

602-107
Auto Service Fundamentals
Credits: 2.00
This automotive course focuses on developing skills in professionalism, safety and the use of basic hand and power tools in accordance with industry standards. Students are introduced to the automotive service industry and learn to use both comprehensive and manufacturer's service information to perform basic under-hood and under-car services. PREREQUISITES: Course 602-130 - Auto Shop Essentials or 602-122

602-109
Auto Transmission/Transaxle
Credits: 4.00
This automotive course focuses on developing the skills needed to diagnose, service and repair automatic transmission/transaxles including overhaul procedures. PREREQUISITES: Course 602-127 - Electrical & Electronic Systems 2

602-120
Auto Service Simulation
Credits: 2.00
In this course, students use acquired skills to analyze, diagnose, and repair: engines and engines subsystems; braking systems; steering and suspension systems; electrical/electronic systems; heating, ventilation and air conditioning; and engine performance. Students work in a simulated shop environment under the direction of Gateway's instructors. Upon completion of the course, students will apply diagnostic strategies to repair vehicle systems. PREREQUISITES: Take 602-104 - Brake Systems Take 602-124 - Steering & Suspension Systems Take 602-128 - Electrical & Electronic Systems 3 Take 602-129 - Auto Scope and Scanner Diagnostics Take 602-196 - Climate Control Systems Take 602-198 - Engine Performance 2 Take 602-205 - Engine Repair II

602-124
Steering & Suspension Systems
Credits: 3.00
This automotive course focuses on developing the skills needed to diagnose, service and repair steering and suspension systems including wheel alignment procedures. PREREQUISITES: Take 602-107 - Auto Service Fundamentals Take 602-130 - Auto Shop Essentials OR 602-122

602-125
Electrical & Electronic Systems 1
Credits: 2.00
This automotive course focuses on developing the skills needed to diagnose, service and repair electrical and electronic systems. Learners apply Ohm's Law to basic electrical circuit diagnosis. PREREQUISITES: Take 602-107 - Auto Service

Fundamentals Take 602-130 - Auto Shop Essentials OR 602-122 COREQUISITES: Complete course 804-134 - Mathematical Reasoning or a higher-level math course.

602-127
Electrical & Electronic Systems 2
Credits: 3.00
This automotive course focuses on developing the skills needed to diagnose, service and repair electrical and electronic systems, including batteries, starting, charging, and lighting systems, and computer control systems. PREREQUISITES: Course 602-125 - Electrical & Electronic Systems 1

602-128
Electrical & Electronic Systems 3
Credits: 3.00
This automotive course focuses on developing the skills needed to diagnose, service and repair electrical and electronic systems including driver information, horn, wiper/washer, power accessories, cruise control, air bag, anti-theft and radio systems. PREREQUISITES: Course 602-127 - Electrical & Electronic Systems 2

602-129
Auto Scope and Scanner Diagnostics
Credits: 3.00
In this course students will learn the general theory, operation and applications of diagnostic systems. OBD scan tools, graphing multi-meters, Digital Storage Oscilloscopes and Exhaust Gas Analyzers will be used to collect vehicle data and diagnose common system failures in late model vehicles. Upon completion of this course learners will be able to utilize OEM and aftermarket diagnostic equipment to scan, diagnose and repair some of the most complex systems on today's vehicles. Preparedness for the ASE (Automotive Service Excellence) exam is emphasized. PREREQUISITES: Take 602-197 - Engine Performance 1 Take 801-136 - English Composition 1

602-130
Auto Shop Essentials
Credits: 3.00

In this course, students explore the automotive service environment. Students will examine automated, web-based information systems used by automotive service professionals including: Wisconsin Chapter ATCP 132 Motor Vehicle Repair, computer-generated repair orders, and Electronic Service Information Systems such as ShopKey® and ALLDATAT. Students practice using the automated tool control system, and, through observation of automotive service employers and the Gateway Auto Lab, develop an awareness of how automotive service work is performed. Upon successful completion of the course, students will be able to work safely in an automotive shop environment and navigate automated, web-based information systems, and they will have gained the knowledge to earn industry-recognized torque and precision measuring certifications through NC3.

602-131
Automotive Service Internship
Credits: 2.00
In this course, students use acquired skills to analyze, diagnose, and repair: engines and engine subsystems; braking systems; steering and suspension systems; electrical/electronic systems; heating, ventilation and air conditioning; and engine performance. Students work in a shop environment under the direction of a master technician. Upon completion of the course, students will apply diagnostic strategies to repair vehicle systems.

602-149
Manual Drive Train and Axles
Credits: 4.00
This automotive course focuses on developing the skills needed to diagnose, service and repair clutches, manual transmissions/transaxle, differentials, four wheel drive/all wheel drive, and drive axles. PREREQUISITES: Take 602-130 - Auto Shop Essentials OR 602-122 Take 602-107 - Auto Service Fundamentals

602-195
Advanced Chassis Systems
Credits: 2.00
This automotive course focuses on developing the skills needed to diagnose, service and repair antilock brakes, vehicle stability enhancement, and electronic steering and

suspension systems. PREREQUISITES: Take 602-104 - Brake Systems Take 602-124 - Steering & Suspension Systems Take 602-127 - Electrical & Electronic Systems 2

602-196
Climate Control Systems
Credits: 3.00
This automotive course focuses on developing the skills needed to diagnose, service and repair climate control systems including heating, cooling, and air distribution. Upon successful completion of the Mobile Refrigerant Handling unit (ATCP-136), a state certificate will be issued. PREREQUISITES: Course 602-127 - Electrical & Electronic Systems 2

602-197
Engine Performance 1
Credits: 3.00
This automotive course focuses on developing the skills needed to diagnose, service and repair powertrain control and ignition systems. Emphasis is placed on diagnostic procedures and the problem-solving techniques associated with automotive engine performance and drivability. PREREQUISITES: Take 602-127 - Electrical & Electronic Systems 2 Take 602-204 - Engine Repair I Complete course 804-134 - Mathematical Reasoning or a higher-level math course. COREQUISITES: Complete course 801-136 - English Composition 1

602-198
Engine Performance 2
Credits: 4.00
This automotive course focuses on developing the skills needed to diagnose, service and repair fuel and emission control systems. Emphasis is placed on diagnostic procedures and the problem-solving techniques associated with automotive engine performance and drivability. PREREQUISITES: Course 602-197 - Engine Performance 1

602-204
Engine Repair I
Credits: 3.00

This automotive course focuses on developing the skills needed to service and repair internal combustion engines. Emphasis is placed on out-of-vehicle engine repair including overhaul procedures. PREREQUISITES: Take 602-130 - Auto Shop Essentials OR 602-122 Take 602-107 - Auto Service Fundamentals

602-205
Engine Repair II
Credits: 2.00
This automotive course focuses on developing the skills needed to diagnose, service and repair internal combustion engines. Emphasis is placed on in-vehicle diagnosis and repairs including valve timing, engine cooling and lubrication systems. PREREQUISITES: Course 602-204 - Engine Repair I

605-108
Introduction to Electronics and Eng
Credits: 5.00
The participants will utilize theoretical analysis, supported by practical hands-on experiments to explore the foundational principles of DC, AC, and Digital Electronics. These principles will be used in the analysis of both analog and digital electronic circuits. In addition, a student design project will provide a practical approach to investigate the Engineering Design process. Upon completion of this course, participants will have the background necessary to successfully teach an introductory course in DC, AC and Digital electronics, along with basic Engineering Design Principles.

605-113
DC/AC I
Credits: 3.00
This introductory course presents the scientific foundation used throughout electronics technology. Topics include DC/AC forms of current, voltage, resistance, capacitance, inductance, and power. Troubleshooting practices will be emphasized and computer technologies will be used to enhance abstract theory. Students perform laboratory experiments and prepare technical reports.

605-114
DC/AC II
Credits: 3.00
An extension of and enhancement to DC/AC I. More advanced topics, such as complex networks, applicable theorems, polyphase systems, and passive filters, will be discussed. Computer simulation software will be used to reinforce theoretical analyses. PREREQUISITES: Complete course 605-113 - DC/AC I COREQUISITES: Complete course 804-115 - College Technical Math 1 or a higher level math course.

605-120
Electronic Devices I
Credits: 4.00
The basic operating principles of diodes, transistors, and linear ICs are presented as they are used in rectifier, amplifier, and oscillator circuits. Lecture theory is reinforced with laboratory assembly, measurements, troubleshooting, and technical report writing. PREREQUISITES: Course 605-113 - DC/AC I

605-121
Electronic Devices II
Credits: 4.00
Introduction to unipolar transistors, JFETs, and MOSFETs being used in linear and nonlinear circuits. Students will use high frequency analysis with both bipolar and unipolar transistors. Operational amplifiers are used as linear amplifiers and in nonlinear circuits. Some circuits covered include voltage amplifiers, summing amplifiers, instrumentation amplifiers, active filters and oscillators. PREREQUISITES: Course 605-120 - Electronic Devices I

605-130
Digital Electronics
Credits: 4.00
Analysis of digital electronic circuits. Realization of logic gates, using TTL and CMOS devices. Verification of theory is accomplished through laboratory experiments with small and medium scale integrated circuits.

605-133
Industrial Data Communications
Credits: 3.00
This course introduces students to the latest technologies in industrial data communications with a focus on digital and analog signaling. Topics include topology, the principles of signaling on physical links, transmission media, data formatting, A-to-D conversion, multiplexing, modulation using digital data, error control, flow control and protocols. Special attention will be given to practical troubleshooting and problem solving of industrial data communications. PREREQUISITES: Course 605-113 - DC/AC I or 605-107 with a minimum grade of C or TR

605-133
Industrial Data Communications
Credits: 3.00
This course introduces students to the latest technologies in industrial data communications with a focus on digital and analog signaling. Topics include topology, the principles of signaling on physical links, transmission media, data formatting, A-to-D conversion, multiplexing, modulation using digital data, error control, flow control and protocols. Special attention will be given to practical troubleshooting and problem solving of industrial data communications. PREREQUISITES: Course 605-113 - DC/AC I or 605-107 with a minimum grade of C or TR

605-134
Telecommunications Installer Operation
Credits: 4.00
This course is actual run time in the lab and field for hands-on telecommunication installation work. Students will work in groups and as individuals to gain experience in real and simulated telecommunications installations. Students bring together all of the theories and skills learned in the other classes and apply them to the installation process. COREQUISITES: Courses 605-166 - Telecom Safety & Installation and 605-197 - Telecom Fire Stopping

605-136
Programmable Controller System Design
Credits: 3.00

This course introduces the student to the design and implementation of an automated process controlled by a Programmable Logic Controller. PREREQUISITES: Course 605-130 - Digital Electronics with a minimum grade of C or TR

605-138
Circuit Construction and Repair
Credits: 3.00
Students will learn and apply the skills for the safe use of hand tools, soldering, desoldering, copper and fiber termination. These skills will be demonstrated in the construction of electronics based projects.

605-150
Industrial Electronics
Credits: 3.00
Covers industrial electrical control using motor starters, relays, pushbuttons, as well as variable speed control of DC motors and power distribution for industry. PREREQUISITES: Take 605-114 - DC/AC II Take 605-120 - Electronic Devices I

605-159
Fiber Optics Theory & Testing
Credits: 1.00
The Fiber Optics Theory and Testing class teaches basic concepts of fiber optics installation and service. These skills, abilities, and knowledge are beneficial for a student seeking employment in the telecommunications cabling field. This class meets some of the hands-on requirements for the ETA-1 Certified Fiber Optic Installer (CFOI) test.

605-166
Telecom Safety & Installation
Credits: 3.00
The Safety and Installation class teaches the importance of safety, and safe practices and procedures. The course teaches basic concepts of telecommunications equipment and cabling installation and other skills needed in the telecommunication field. Students will have the opportunity to earn a Fire Stopping and a Copper Certification. This class meets some of the requirements for the ETA-I Residential Electronics

Systems Installer (RESI) and Certified Data Cabling Installer Certification (DCIC). It also prepares students for the BICSI Installer Level 1 Certification exam. These skills, abilities and knowledge are beneficial for a student seeking employment in the telecommunications cabling field.

605-183
Electronics/Future Trends in
Credits: 3.00
This course will study future trends in the electronics field. Topics covered are communications, controls, manufacturing, and newly developed technologies. Students will complete a project.

605-190
Microprocessors
Credits: 4.00
An introduction to microcomputer programming. Digital codes, registers, and register instruction, logic gates and truth tables are covered. The 7400 series of integrated circuit chips are studied. COREQUISITES: Take 605-114 - DC/AC II Take 605-121 - Electronic Devices II Take 801-197 - Technical Reporting

605-197
Telecom Fire Stopping
Credits: 2.00
The Fire Stopping class teaches the importance of fire stopping and fire safety procedures. This course teaches basic concepts of fire stopping and cabling installation.

606-103
Material Properties
Credits: 2.00
Students in this course learn and apply the mechanical strength, chemistry, and material basic characteristic properties, for materials including; metals, plastics, composites, nano-technologies, powered metals, and non-metals. Students will have a basic understanding of how to select materials that fit the engineering product design requirements.

606-116
Machine Design/Elements of
Credits: 3.00
Procedures and consideration in design of simple machine elements such as shafts, bearings, couplings, keys, pins, springs, clutches, brakes, and pressure cylinders. Emphasis on neat, orderly procedure and a thorough consideration of design specifications. PREREQUISITES: Course 606-131 - Strength of Materials

606-118
Mechanisms
Credits: 2.00
Kinematics of machinery, displacement, velocity and acceleration, analysis of linkages, cams and gears, geometry of involute gears, properties of standard spur, helical, bevel, and planetary gears. Practical problems develop an understanding of principles. PREREQUISITES: Take 806-154 - General Physics 1

606-119
Motor Controls
Credits: 3.00
This course provides a practical approach to motor control of various machines for non-electrical or electronic technicians. It discusses electrical and mechanical components and how they are connected to control different types of motors. Many different types of control circuits are discussed.

606-128
CAD - Solidworks
Credits: 2.00
Students use Solidworks software to create solid models of various machine components. They also convert solid parts into conventional 2-D orthographic drawings which include sections, auxiliary views, and dimensions. Students create assembly drawings and configurations of various parts.

606-129
CAD/Solids Advanced
Credits: 2.00
A continuation of the basic solids class that includes assembly drawings, exploded isometric drawings, customization, sheet metal drawings, import/export functions, thin features, and the use of Microsoft Office features to increase productivity. PREREQUISITES: Course 606-128 - CAD - Solidworks

606-131
Strength of Materials
Credits: 3.00
Internal stresses and deformation of elastic bodies resulting from external forces. Tables of properties of engineering materials are used. Analysis of simple and combined stresses relative to the properties of the materials to meet functional requirements. PREREQUISITES: Take 606-151 - Statics

606-137
Manufacturing Process Applications
Credits: 2.00
Students spend part of the course in the Machine Shop learning basic lathe, mill, drill press, and grinder operations as well as layout. Part of the course is taught in the welding lab where students learn the operations of gas and arc welding. PREREQUISITES: Course 606-159 - Manufacturing Processes with minimum grade D

606-138
Design Problems
Credits: 2.00
In this course, students diagram ideas, gather data, calculate project and process capabilities, and analyze problems in a project-based environment. Students initiate projects using mechanical design and manufacturing technology skills. Upon completion of the course, students will be able to judge the feasibility of a mechanical design or manufacturing process. PREREQUISITES: Course 801-136 - English Composition 1

606-141
Autocad Mech Design Technician
Credits: 3.00
This course is an introductory course in the latest version of AutoCAD. No prior CAD or drafting experience is necessary. While it would be helpful to have some knowledge of computers, geometry, and design problems, this too is not necessary. This course is designed for students that have had no or very little exposure to CAD. Upon the successful completion of all assigned work in this course, a student should have an understanding of how to create basic geometric shapes and drawings as well as applying dimensions using AutoCAD software. Students will use advanced CAD dimensioning concepts and edit and modify various types of entities, such as dimensions, hatch patterns, text and output to paper views and drawings. Use of grips, attributes, and Xrefs, menu customization, and profiles are covered. While drawing will be created in this class, drafting is not taught. This course deals strictly with the basic use of AutoCAD software.

606-142
Intro to Creo/ProEngineer
Credits: 2.00
In this course, students use Pro-E software to create solid models of various machine components, convert solid parts into conventional 2-D orthographic drawings, create section and auxiliary views with applied dimensions of various components, and create assembly drawings of various parts.

606-149
Mechanical Engineering, Introduction to Tech
Credits: 2.00
This course will instruct students in manual drafting techniques; however, most of the material may be completed using CAD. It is designed to develop knowledge and basic mechanical drafting skills. Upon completion of this course, the student will have developed skills in the use of drafting tools, lettering, geometric construction, orthographic projection, sketching, visualization, dimensioning, and basic tolerancing. COREQUISITES: Course 606-128 - CAD - Solidworks

606-151
Statics
Credits: 3.00
Study of forces in equilibrium; types of forces, couples, vector and scalar quantities, force systems, friction, centroids, centers of gravity, moments of inertia of areas. COREQUISITES: Course 804-114 or 804-115 - College Technical Math 1

606-152
Engineering Graphics w/CAD 1
Credits: 2.00
Advanced concepts of topics from Intro to MET are covered as well as several new topics. Lab assignments are done on a CAD workstation. Topics covered include drawing primary and secondary auxiliary views, sections, threads and fasteners, and creating drawings of weldments. PREREQUISITES: Courses 606-128 - CAD - Solidworks 606-149 - Mechanical Engineering, Introduction to Tech

606-153
Engineering Graphics w/CAD 2
Credits: 2.00
Advanced concepts from Engineering Graphics 1 are covered as well as several new topics. Lab assignments are done on a CAD workstation. Topics covered include creating working drawings of simple and complex assemblies, redesigning existing parts and assemblies, and creating welded assemblies. PREREQUISITES: Course 606-152 - Engineering Graphics w/CAD 1

606-154
Engineering Graphics w/CAD 3
Credits: 2.00
Advanced concepts of topics from Engineering Graphics 1 are covered as well as several new topics. Lab assignments are done on a CAD workstation. Topics covered include creating gear, sprocket, and pulley drawings and cutting data, understanding the nomenclature associated with gear, sprocket, and pulley drawings, locating information about standard parts from tables and charts, creating cam displacement diagrams and profiles, and using vendor catalogs to select parts. PREREQUISITES: Course 606-152 - Engineering Graphics w/CAD 1

606-159
Manufacturing Processes
Credits: 2.00
Basic methods of fabrication used in modern manufacturing, welding, electroforming, casting, metallic coating, anodizing, plating and chip removal, using numerical control, and hydraulic systems. PREREQUISITES: Course 606-103 - Material Properties or 606-136 with a minimum grade C or TR COREQUISITES: Course 801-136 - English Composition 1;

606-160
Fluid Power and Design
Credits: 3.00
This course is designed to give the student a foundation in hydraulics and pneumatics. The units of instruction will cover components, general operating characteristics and principles, fluid power systems, and problem solving techniques required to put these systems together.

606-501
AutoCAD for the Trades
Credits: 1.25
This course has been added to enhance our existing apprenticeship program. It will also serve to familiarize our apprentices with some of the technological advancements that have already been implemented into the sheet metal field. AutoCAD has all but replaced the hand drafting methods that have been practiced for years. This course will teach the basic functions of the AutoCAD program and allow the students to apply these skills in practical field-related applications. Work sheets, drawings and quarterly tests will be used to assess the student's progress.

607-102
Conflict Resolution in Engineering/Construction
Credits: 2.00
This course is designed to help students learn how to recognize, approach and defuse various confrontational situations on the construction job site and in the workplace.

607-104
Building Material & Construction Method
Credits: 3.00
This course is an introduction to common building materials and construction methods including soils, aggregates, pipes, cement, concrete, asphalt, steel, wood masonry and residential and commercial building materials.

607-117
Geographical Information Systems I
Credits: 2.00
This is an introductory course into GIS (Geographical Information Systems), GIS terminology, data structure, and data analysis based on spatial parameters. Students learn how to manipulate, parse, combine, and even build basic geographical databases. Applications ranging from land record management to marketing to political science are addressed.

607-118
Geographical Information Systems II
Credits: 2.00
This is the second course in the Geographical Information System series (GIS). Students explore the conceptual framework of geographic information systems and spatial modeling and develop GIS database abilities through group and self- selected projects. Emphasis is on independent learning and synthesis of GIS into the student's studies. PREREQUISITES: Course 607-117 - Geographical Information Systems I

607-127
Civil Engineering and Survey Drafting
Credits: 3.00
Using MicroStation, the student will prepare standard drawings typically used in the field of Civil Engineering...including Title Pages, Typical Sections, Plan & Profiles, Cross Sections, Sewer Profiles, Alignment Tie Sheets, etc. PREREQUISITES: Take 607-187 - 3D Cad: Digital Terrain Modeling

607-128
Construction Estimating
Credits: 3.00
This course is designed to develop the skills for preparation of cost estimates using materials, labor, and equipment in construction. Time and cost components are also addressed in a unit production and a project scheduling evaluation using the critical path method. COREQUISITES: Course 804-135 - Quantitative Reasoning or 804-115 - College Technical Math 1 Course 801-136 - English Composition 1

607-129
Future Trends in Civil Engineering/ Architectural Technology
Credits: 2.00
In this course, students will explore an array of emerging technologies, processes, and approaches that provide a framework, present their findings in a formal setting, and model an application of the selected element to a traditional design-build approach. Upon completion of the course, students will be able to relate emerging technologies, processes, and approaches to building design and construction practice. PREREQUISITES: Take 607-104 - Building Material & Construction Method Take 607-141 - Construction Basics OR 607-103

607-132
Structural Mechanics - Civil Engineering
Credits: 3.00
This course introduces students to basic principles of structural mechanics (statics and strength of materials), with special emphasis placed upon application of these principles in the design of simple beams used in commercial buildings. PREREQUISITES: Course 804-134 - Mathematical Reasoning, 804-135 - Quantitative Reasoning or 804-115 - College Technical Math 1

607-134
Steel - Design and Detailing
Credits: 2.00
This course is designed so that students will understand the design and detail of structures using LRFD methods, including simple beams, cantilevers, and axially loaded columns. Design of connections will also be addressed. PREREQUISITES: Course 607-132 - Structural Mechanics - Civil Engineering

607-135
Reinforced Concrete - Design & Detailing
Credits: 2.00
This course is designed so that students will understand the design and detail of structures using reinforced concrete, including simple beams, cantilevers, retaining walls, and axially loaded columns. PREREQUISITES: Course 607-132 - Structural Mechanics - Civil Engineering

607-136
Construction Project Management
Credits: 2.00
This course is designed to introduce the concepts of overall construction project management including scheduling, resource allocation, cost and technical constraints.

607-139
Material Testing & Inspection
Credits: 4.00
Students will conduct and evaluate standardized field and laboratory testing on civil engineering materials as required for inspection certifications. PREREQUISITES: Course 607-104 - Building Material & Construction Method;

607-141
Construction Basics
Credits: 2.00
In this course, students develop general skills helpful in construction. Students are exposed to the construction industry, tools and materials typically used in construction, construction health and safety, blueprint reading, and diversity in the construction industry. Upon completion of the course, students will have knowledge and skills to perform basic duties on a job site.

607-148
Wood Design and Detailing
Credits: 1.00

This course is designed to teach the students to design and detail basic wood structural components and connections. PREREQUISITES: Course 607-132 - Structural Mechanics - Civil Engineering

607-148
Wood Design and Detailing
Credits: 1.00
This course is designed to teach the students to design and detail basic wood structural components and connections. PREREQUISITES: Course 607-132 - Structural Mechanics - Civil Engineering

607-154
Sewer and Water Systems
Credits: 2.00
Using the latest hydraulic software along with the Standard Specifications for Sewer and Water in Wisconsin, students will learn the basic applications of hydrology and hydraulics for various applications including run off calculations and design of culverts, storm sewers, detention basins, etc. Students will also be acquainted with the principles and software applications in designing roadway drainage, water and sewer lines. PREREQUISITES: Take 607-104 - Building Material & Construction Method Take 804-134 - Mathematical Reasoning 804-135 - Quantitative Reasoning OR 804-115 - College Technical Math 1 Take 607-191 - Hydrology and Erosion Control

607-161
Legal Aspects of Land Surveying
Credits: 2.00
This course covers the legal concepts and doctrines related to land, land ownership, duties and responsibilities of surveyors, and Wisconsin statutes and local codes. PREREQUISITES: Course 607-169 - Land Surveying Basics with a minimum grade of C

607-166
Capstone: CET Highway Technology
Credits: 1.00
The Civil Engineering Technician Highway capstone course is designed to guide students in resolving related problems by applying skills and techniques acquired

throughout the program. The capstone course will provide an overall program assessment opportunity aimed at showcasing a student's technical skills developed from the Civil Engineering Technology Highway program courses. PREREQUISITES: Take 607-132 - Structural Mechanics - Civil Engineering COREQUISITES: 607-154 - Sewer and Water Systems Take 607-179 - Route/Highway Design and Surveying

607-167
Capstone: CET Freshwater Resources
Credits: 1.00
The Civil Engineering Technician - Fresh Water Resources capstone course is designed to guide students in resolving related problems by applying skills and techniques acquired throughout the program. The capstone course will provide an overall program assessment opportunity aimed at showcasing a student's technical skills developed from the Civil Engineering Technology Fresh Water Resources program courses. COREQUISITES: Take 607-195 - Wastewater Operations OR 607-185 Take 607-198 - Stormwater Management OR 607-186

607-169
Land Surveying Basics
Credits: 2.00
This course is an introduction to the basics of land surveying ranging from pacing/taping and level loops thru the use of a total station to accomplish basic traverses. This course also includes an introduction to drawing deed descriptions, basic surveying terms, and units of measure.

607-170
AutoCAD for Construction Sciences
Credits: 2.00
This course teaches participants the basics of Computer Aided Drafting (CAD) using AutoCAD and other design software within the various fields of construction sciences and interior design. Students develop their CAD skills while working on various real world construction type projects.

607-172
Drone Inspection
Credits: 1.00
In this course, students apply their knowledge and skills of drone flying to various inspection aspects related to construction. Students develop drone flight paths to inspect and acquire data, while determining the best ways to obtain and process the desired information from inspections. Students explore key aspects of establishing flight paths, determining what is needed from various inspection sites, what is the best various forms of data to obtain from the inspection using a drone, and how to perform data analysis on the resulting data. Upon completion of the course, students will be able to critically assess and inspect various construction sites using a drone, ensuring to obtain quality data and perform data analysis from the site. PREREQUISITES: Take 607-176 - Drone and Lidar Surveying

607-173
Land Surveying Fundamentals
Credits: 3.00
This course includes instruction in the use of instruments used in the field of construction surveying, such as the transit, level, and chains, and their application in the solving of typical field problems. The student does the field work and office computations required in the solution of these problems. PREREQUISITES: Courses 607-169 - Land Surveying Basics and 607-187 - 3D Cad: Digital Terrain Modeling and course 804-134 - Mathematical Reasoning, 804-135 - Quantitative Reasoning or 804-115 - College Technical Math 1

607-175
Material Testing
Credits: 3.00
In this course, learners analyze various construction materials based on Wisconsin Department of Transportation's Highway Technician Certification Program (HTCP) requirements. Upon completion of the course, learners will be able to demonstrate how to properly test fresh Portland Cement Concrete as required for the HTCP PCC1 certification. PREREQUISITES: Take 607-104 - Building Material & Construction Method Take 607-141 - Construction Basics

607-176
Drone and Lidar Surveying
Credits: 1.00
In this course, learners develop skills to fly drones and utilize lidar surveying equipment. Learners use these skills to determine existing ground data. Upon completion of this course, learners will be able to create existing topographical point cloud data obtained from both drones and lidar systems.

607-177
Concrete Repair
Credits: 2.00
In this course, learners apply industry codes for the assessment of damaged and deteriorated Portland cement concrete members in order to inspect, analyze, and classify the distress in concrete structures. Industry practices for repairing damaged members containing these distresses will be identified. Upon completion of the course, learners will be able to inspect existing concrete members in order to choose potential industry options for repair. PREREQUISITES: Take 607-175 - Material Testing OR 607-139 - Material Testing & Inspection

607-178
Boundary Location and Research
Credits: 2.00
In this course, learners assess boundary locations via research of public and private records. Learners interpret principles of evidence and the interpretation of written documents used in boundary determination, apply surveying methods for measuring distance and angular values, and demonstrate surveying practices including note keeping, computation, and writing descriptions. Upon completion of the course, learners examine boundary locations based on the study of the Wisconsin Statutes and local ordinances relating to the preparation of subdivision maps and plats. PREREQUISITES: Take 607-169 - Land Surveying Basics

607-178
Boundary Location and Research
Credits: 2.00
In this course, learners assess boundary locations via research of public and private records. Learners interpret principles of evidence and the interpretation of written

documents used in boundary determination, apply surveying methods for measuring distance and angular values, and demonstrate surveying practices including note keeping, computation, and writing descriptions. Upon completion of the course, learners examine boundary locations based on the study of the Wisconsin Statutes and local ordinances relating to the preparation of subdivision maps and plats. PREREQUISITES: Take 607-169 - Land Surveying Basics

607-179
Route/Highway Design and Surveying
Credits: 3.00
In this course, learners identify the key principles of roadway design and surveying construction using Wisconsin's Department of Transportation's Facility Design Manual. Students model and design aspects of roadways including horizontal alignments, vertical profiles, super elevations, pavement designs, construction considerations, etc. Learners survey existing locations, develop a proposed roadway profile, and layout construction staking for the proposed project. Upon completion of this course, learners will be able to summarize the key processes required to develop a proposed roadway. PREREQUISITES: Take 607-173 - Land Surveying Fundamentals Take 607-127 - Civil Engineering and Survey Drafting

607-182
Water Sampling and Testing
Credits: 2.00
Review and application of technology and techniques for gathering data from water resources and water treatment processes. PREREQUISITES: Take 806-127 - Chemistry 1 Take 607-185 OR 607-195 - Wastewater Operations

607-184
Environmental Impact Assessments
Credits: 2.00
Review of process and content of environmental impact assessments including evaluation of environmental impacts and alternatives PREREQUISITES: Course 801-136 - English Composition 1 Take 607-197 - Water Regulations OR 607-183

607-187
3D Cad: Digital Terrain Modeling
Credits: 2.00
This course is an introduction to the concepts and creation of Digital Terrain Models (DTM) including the extrapolation of contours, profiles and cross sections from the DTM using Autodesk Civil3D software.

607-188
Capstone: Geospatial Surveying Tech
Credits: 1.00
The Geospatial Surveying Technician capstone course is designed to guide students in resolving related problems by applying skills and techniques acquired throughout the program. The capstone course will provide an overall program assessment opportunity aimed at showcasing a student's technical skills developed from the Geospatial Surveying Tech program courses.

607-189
Geospatial Data Processing
Credits: 2.00
This course is designed to develop advanced data processing skills required by full time surveyors including data sets from remote sensing technologies.
PREREQUISITES: Course 607-169 - Land Surveying Basics

607-190
Legal Research and Boundary
Credits: 4.00
This course is an introduction to the legal concepts and doctrines related to land, land ownership, duties and responsibilities of surveyors, Wisconsin statutes and local codes. This includes the principles and practices for boundary location and research. The public land system will be covered in detail along with the principles for performing surveys. PREREQUISITES: Course 607-169 - Land Surveying Basics

607-191
Hydrology and Erosion Control
Credits: 1.00

In this course, learners demonstrate the distribution and properties of waters on the earth, concepts of the hydrologic cycle, and basic principles of meteorology, precipitation, streamflow, and groundwater flow. Learners classify various erosion control practices to protect the environment during construction. Upon completion of the course, learners will be able to develop storm water pollution protection solutions for a given construction site.

607-191
Hydrology and Erosion Control
Credits: 1.00
In this course, learners demonstrate the distribution and properties of waters on the earth, concepts of the hydrologic cycle, and basic principles of meteorology, precipitation, streamflow, and groundwater flow. Learners classify various erosion control practices to protect the environment during construction. Upon completion of the course, learners will be able to develop storm water pollution protection solutions for a given construction site.

607-192
Water Treatment Pumps
Credits: 2.00
In this course, learners relate the mechanical and electrical components of a pump to the different pump types, operating specifications, and the pump's applications. Upon completion of the course, learners will be able to explain how to inspect and troubleshoot the operational performance of pumps used within the water treatment profession.

607-193
Introduction to Water Chemistry
Credits: 2.00
In this course, learners relate basic chemical concepts and principles such as elements, compounds, states of matter, and reactions that are applicable to evaluating and regulating water quality. Upon completion of the course, learners will summarize main water topics including chemical equilibrium and kinetics, acid-base equilibria and

buffering, turbidity, solid precipitation and dissolution, oxidation and reduction reactions.

607-194
Freshwater Operations
Credits: 2.00
In this course, learners compare environmental and treatment options necessary to operate a potable groundwater well system. Learners identify the operational components of a groundwater treatment plant and make operational assessments based on established industry criteria. Learners extend that knowledge to a municipal water treatment plant operation. Learners identify how to safely operate and maintain coagulation, flocculation, sedimentation, filtration, disinfection, iron and manganese control, fluoridation, softening, trihalomethanes, demineralization, chlorination, dichlorination, and control corrosion processes in order to meet lead requirements. Upon completion of the course, learners will be able to summarize the role of the operator, source water, water treatment processes, reservoir management, and operational procedures necessary to produce a safe and aesthetically appropriate water supply for human consumption. PREREQUISITES: Take 607-193 - Introduction to Water Chemistry

607-195
Wastewater Operations
Credits: 2.00
In this course, learners compare environmental and treatment options necessary to treat wastewater beyond treating freshwater. Learners illustrate various wastewater treatments stages including preliminary, primary, and secondary treatment. Learners identify types of microorganisms found in the process, aerobic and anaerobic sludge digestion, and sludge disposal procedures. Learners summarize environmental regulations, preventive maintenance practices, and basic safety precautions related to wastewater treatment. Upon completion of the course, learners will be able to model operational procedures necessary to treat common wastewater. PREREQUISITES: Take 607-193 - Introduction to Water Chemistry COREQUISITES: Take 607-194 - Freshwater Operations

607-196
Water Distribution Systems
Credits: 2.00
In this course, learners compare practical aspects of operating and maintaining water distribution systems while emphasizing safe practices and procedures. Learners summarize water distribution systems, operator duties, procedures for operating and maintaining clear wells and storage tanks. Learners classify components and characteristics of distribution system facilities. Learners summarize the operation and maintenance of distribution systems. Learners examine how to maintain water quality in the system, disinfect new and repaired facilities and explore techniques for recognizing hazards that emphasize safe operational practices and procedures. Upon completion of the course, learners will be able to plan an effective water distribution system. PREREQUISITES: Take 607-193 - Introduction to Water Chemistry

607-197
Water Regulations
Credits: 1.00
In this course, learners compare regulations related to water including reviewing scholarly articles, case law, and water management statutes and policies. Upon completion of this course, learners will be able to summarize the federal and state regulations related to water treatment.

607-198
Stormwater Management
Credits: 2.00
In this course, learners examine stormwater management history and regulations, urban hydrology and hydraulics, stormwater quality and receiving-water impacts, design of drainage systems with best management practices, and computer modeling techniques. Learners inspect existing stormwater management systems for compliance with existing regulations and management plans. Upon completion of this course, learners will be able to develop a stormwater management plan for a given site redevelopment based on local and state regulations PREREQUISITES: Take 607-191 - Hydrology and Erosion Control

607-199
Drone Survey Mapping
Credits: 1.00
In this course, learners develop the skills required to create automated drone flights to survey existing ground conditions. Learners process these flights to obtain digital terrain data. Upon completion of the course, learners will be able to survey and create a model of an existing ground location using a drone. PREREQUISITES: Take 607-176 - Drone and Lidar Surveying

612-102
Pneumatics/Hydraulics - Introduction
Credits: 3.00
The fundamental principles and physical laws governing fluid power and pneumatics are studied. The operation of the various control valves and actuators will be explored through a combination of theory and practical lab exercises.

612-115
Hydraulics/Advanced
Credits: 3.00
Analysis of the various selection factors for hydraulic components. Design of various components to determine how they meet specific duty requirements. Physical laws will be applied to determine how hydraulics can best be applied for maximum efficiency. Make component selections based on a given set of criteria.

614-102
Capstone: Construction Proj Management
Credits: 2.00
The Construction Project Management Capstone course is designed to apply the practice of overall construction project management including scheduling, resource allocation, cost and technical constraints. PREREQUISITES: Course 607-136 - Construction Project Management

614-103
Drone Building Inspections
Credits: 1.00

In this course, learners develop the skills required to create automated and manual drone flights to perform external inspections of an existing building. Upon completion of the course, learners will be able to perform drone flights to inspect existing external buildings. PREREQUISITES: Take 607-176 - Drone and Lidar Surveying

614-107
Residential and Commercial Inspection
Credits: 3.00
This course is designed to teach students the skills needed to become a residential and commercial inspector including a focus on Energy Audits. PREREQUISITES: Take 614-108 - Residential Code Courses 607-104 - Building Material & Construction Method COREQUISITES: Course 614-114 - Commercial Code

614-108
Residential Code
Credits: 1.00
This course is a study of the Wisconsin Uniform Dwelling Code and its application to residential design.

614-108
Residential Code
Credits: 1.00
This course is a study of the Wisconsin Uniform Dwelling Code and its application to residential design.

614-110
Architectural Drafting/Residential
Credits: 3.00
This course is the capstone application class regarding residential design, including a full design of a residential building using BIM. Students develop a set of working drawings and specifications for a residential building using Autodesk Revit. PREREQUISITES: Course 614-150 - 3D CAD:Building information Model COREQUISITES: Course 614-108 - Residential Code

614-114
Commercial Code
Credits: 2.00
This course is a study of the Wisconsin Commercial Building Code (including the International Building Code) and its application to commercial design.

614-114
Commercial Code
Credits: 2.00
This course is a study of the Wisconsin Commercial Building Code (including the International Building Code) and its application to commercial design.

614-115
Architectural Drafting/Commercial
Credits: 3.00
This course is the capstone application class regarding commercial design, including a full design of a commercial building using BIM. Students develop a set of drawings and specifications for a commercial building using Autodesk Revit. PREREQUISITES: Course 614-150 - 3D CAD:Building information Model COREQUISITES: Course 614-114 - Commercial Code

614-123
Capstone: Architectural Structural Tech
Credits: 1.00
The Architectural-Structural Engineering Technician capstone course is designed to guide students in resolving related problems by applying skills and techniques acquired throughout the program. The course will provide an overall program assessment opportunity aimed at showcasing a student's technical skills developed from the Architectural-Structural Engineering Tech program courses. PREREQUISITES: Course 607-134 - Steel - Design and Detailing or 614-100 COREQUISITES: Complete course 614-115 - Architectural Drafting/Commercial and course 607-135 - Reinforced Concrete - Design & Detailing or 614-101

614-138
3D Modeling and Virtualization
Credits: 1.00
Using 3D modeling software and hardware, students will create and virtualize their construction project designs for presentations and portfolio development. PREREQUISITES: Courses 614-150 - 3D CAD:Building information Model and 607-187 - 3D Cad: Digital Terrain Modeling

614-140
Mechanical Systems for Buildings
Credits: 3.00
This course is an introduction to the broad field of mechanical systems and their implications on architectural form and design. It will provide students with the information and tools required to assess the need for an application of various building systems including mechanical, electrical, plumbing, vertical transportation, fire protection, etc. PREREQUISITES: Course 607-104 - Building Material & Construction Method

614-140
Mechanical Systems for Buildings
Credits: 3.00
This course is an introduction to the broad field of mechanical systems and their implications on architectural form and design. It will provide students with the information and tools required to assess the need for an application of various building systems including mechanical, electrical, plumbing, vertical transportation, fire protection, etc. PREREQUISITES: Course 607-104 - Building Material & Construction Method

614-150
3D CAD:Building information Model
Credits: 2.00
This course is an introduction to the concepts and creation of Building Information Modeling (BIM) projects including the extrapolation of schedules, plans, sections and elevations from the BIM using Autodesk Revit software.

620-101
Variable Speed Drives
Credits: 3.00
This course covers the theory and operation of DC and AC variable speed drives that run electrical motors. Content will include servos, stepping motors, and control of general purpose motors. Feedback sensing devices in position and velocity control will be covered. Laboratory experiments will be used to help the student in understanding the complex nature of those systems. PREREQUISITES: Course 620-150

620-108
Fundamental of Industrial Controls
Credits: 3.00
Industrial electrical hardware such as motors and controls are studied. Industrial electrical control circuits are developed and wired. Troubleshooting techniques are used to correct problems in wiring or controls. Motor starters, industrial control relays, timers, proximity switches, and electric eyes are studied, including proper selection and wiring techniques. Ladder logic and wiring diagrams are examined and drawn. This course is for an individual that already has a basic understanding of electricity. PREREQUISITES: Take 664-110 - Intro to Mechatronics; Minimum Grade C

620-109
Drone Repair Basics
Credits: 1.00
In this course, learners investigate the electrical and mechanical components of a drone. Upon completion of the course, learners will be able to investigate and make minor repairs to a drone. COREQUISITES: Take 607-176 - Drone and Lidar Surveying

620-140
Programmable Controllers
Credits: 2.00
The operation of the Programmable Logic Controller (PLC) is studied for the purpose of various applications. The hardware, including various I/O modules, is studied for applications and capabilities. Electrical ladder logic provides the documentation and programming means. The student will be able to write programs, load them into the

PLC, troubleshoot any errors, and document the function and input/output of the control. PREREQUISITES: Course 620-103

620-305
Process and System Controls for Maint
Credits: 3.00
Students will study process controls for flow, pressure, temperature and level typically found in industrial applications. Hands-on labs will reinforce the concepts studied. Automation systems will be explored with emphasis on the integration of the various components into a working system. Safety of these systems will be covered through labs and class discussions. PREREQUISITES: Course 620-302 or 620-310 - Industrial Controls for Maintenance and 804-370 - Mathematics I/Applied with minimum grade C or TR

620-310
Industrial Controls for Maintenance
Credits: 2.00
In this course, learners build foundation skills needed in industrial electrical systems such as relay control circuits, timing circuits, counter circuits using ladder logic and electrical drawings. Learners utilize lockout tagout, Ohm's law, multi-meters and oscilloscopes in analyzing and wiring electrical systems. Learners build and troubleshoot relays, timers and counters. Upon completion of this course learners will analyze, develop, build and troubleshoot ladder diagrams with relays, timers and counters.

620-311
PLC's and HMI's I
Credits: 2.00
In this course, learners examine the basic function of Programmable Logic Controllers (PLC) and Human-Machine Interfaces (HMI). They replace and download a program to return a machine to service. Learners analyze programming changes and use a computer to develop communication between PLCs and HMIs. Upon completion of the course, learners will be able to design, edit, test, and document PLC programs. PREREQUISITES: Complete 620-302 or 620-310 - Industrial Controls for Maintenance prior

620-508
Power Transmission Systems
Credits: 1.00
Course learning outcomes include examining mechanical power transmission systems and components. Belts, chain drives, gears & gear drives, couplings, and clutches & brakes will be examined. Apprentices will develop skills inspecting, installing, and maintaining power transmission systems and troubleshooting failures. Apprentices will also learn about safety, documenting work performed, communicating the status of work, and working collaboratively.

620-509
Welding Basics
Credits: 1.00
Course compares common welding processes and develops apprentice skills related to welding, cutting, heating and using oxygas. Welding with arc and MIG will help build skills and develop competency working with metal. Additional course learning outcomes may include common cutting and joining techniques associated with applicable trade work processes.

620-510
Math Review for Mechatronics
Credits: 1.00
Course competencies include building apprentice skills working with fractions, decimals, measurement and ratios commonly used by the trade. Measurement, tolerances and interpreting trade related information will help apply math concepts to industrial and manufacturing work processes. Basic algebra, geometry and trigonometry will be applied to mechatronics job duties and tasks. Converting between US and metric units is also included. Course provides a foundation for mechanical and electrical problem solving involving math.

620-511
Mechatronic Principles
Credits: 2.00

Course learning outcomes will examine both introductory mechanical & electrical concepts as a foundation for future coursework and on-the-job learning. Troubleshooting principles associated with mechatronics will also be introduced. Apprentices will explore safety, measurement, mechanical principles, electrical principles, mechanisms, metallurgy, and troubleshooting.

620-512
Motors & Motor Controls
Credits: 2.00
This course examines the fundamentals of electric motors and motor control. Apprentices will learn to recognize and draw the basic symbols, the language of motor control, and how to apply these symbols, into current industry adopted formats. Apprentices will also learn to draw and read ladder and wiring diagrams, and be introduced to the logic used in motor control. Learners will apply this logic to correctly interpret, install, service, and wire control circuits. Wiring of panels, machines, and systems will also be examined.

620-513
Machining Concepts
Credits: 2.00
Course introduces cutting, drilling, lathes, and milling operations to apprentices in mechatronics. Course topics also include work holding devices, measuring tools and measurement, safety, machine guards, tooling, print reading, and speeds & feeds. Math skills will be applied to machining related work practices.

620-514
DC Electricity for Mechatronic
Credits: 1.00
This course introduces the fundamental concepts of and computations related to DC electricity. Emphasis is placed on circuit analysis and the problem-solving skills necessary for the maintenance of mechatronic and advanced manufacturing systems. Competencies related to metering and safe use of measuring devices are included.

620-515
AC Electricity for Mechatronics
Credits: 1.00
This course is designed to introduce the industrial electrical apprentice to the basic concepts of alternating current. Emphasis is placed on circuit analysis and the problem solving skills necessary for the maintenance of mechatronic and advanced manufacturing systems.

620-516
National Electrical Code
Credits: 1.00
Apprentices will examine the National Electric Code and apply information to work practices involving mechatronic systems.

620-517
Fluid Power Systems
Credits: 2.00
Course learning outcomes include inspecting, testing, servicing, and troubleshooting hydraulic, pneumatic, compressed air, and vacuum systems. Apprentices will review safety procedures for various common maintenance tasks.

620-518
Introduction to Robotic System
Credits: 2.00
Course introduces the apprentice to the robot teach pendant and methods of robot jogging. Learners will be taught to replace servo motors, remaster the robot, and back up robot software and programs. Maintenance, servicing and safety will be emphasized. Cable management systems will be examined.

620-519
Introduction to Robotic Integration
Credits: 3.00
Mechatronic apprentices will explore offsets, vision systems and system integration using robotic simulation and capstone project. The project will tie everything learned

during their apprenticeship together - safety, machine integration, vision systems, CNC, machine applications for robotics, troubleshooting, and work documentation.

620-520
Servos and Drives
Credits: 1.00
Course introduces concepts, terminology, and safety associated with drives and servos used in industry and manufacturing. Course is designed to give the apprentice the knowledge required by industry to program, service and maintain variable frequency drives and related equipment. Course learning outcomes include setting up and programming drives in a lab, shop or training center setting.

620-521
Intro to Programmable Logic Controllers
Credits: 2.00
This course is designed to teach the fundamentals of programmable logic controllers and their programming software. The course will introduce terminology, concepts, schematic reading and basic programming. Technologies and PLC use in manufacturing and mechatronic systems will be emphasized.

620-522
HMI Technologies & PLC Applications.
Credits: 2.00
Human machine interface devices, software and technologies will be examined for mechatronic systems. Apprentices will work in a lab/shop/training center setting to create touchscreens, setup networks, and configure systems.

623-146
Introduction to Lean/Six Sigma
Credits: 2.00
This introductory course will make students aware of all aspects of the manufacturing environment. The class will include overviews in the key aspects of Lean and Six Sigma. Various types of manufacturing and assembly processes will also be covered.

623-147
Manufacturing Shop Safety
Credits: 1.00
This class will cover general shop safety for a machining environment. The course will raise the awareness of workers to the hazards around them and explain work safety and how best to protect themselves. Other safety topics will be covered, including MSDS sheets, personal protective equipment, and lockout tag out.

625-126
STEM Guitar Building
Credits: 2.00
Learn about design and manufacturing principles and techniques through the process of designing and building an electric guitar. Topics include body and headstock design, basic woodworking, finishing, fretting, electronics assembly, hardware assembly and guitar setup. Discover the processes that go into creating a consumer product and walk away from the class with a beautiful solid body electric guitar that you designed and built yourself.

625-130
Intro to STEM Guitar Building
Credits: 1.00
Learn about disassembly and assembly techniques using an electric guitar. Topics include part identification, hardware disassembly and assembly, and guitar setup. Learn the process of intonation as you perform the final alignment to restore the guitar to playable condition.

628-109
Mechanical Skills for Technicians
Credits: 3.00
This course covers the basic mechanical skills needed by a technician. Skills covered include the use and care of hand tools and small power tools, drilling, tapping, removal of broken bolts, studs, and helicoil insertion. Basic measuring tools and techniques are also covered. Other topics include type and use of fasteners, lubricants and adhesives used in repair, and assembly of automated machines.

628-115
Industrial Robotics and Programming
Credits: 3.00
A study in industrial robotics and programming. Students will learn to program a FANUC industrial robot and earn FANUC CERT Certification. Students will develop frames, learn file manipulation and program the robot to manipulate products, perform different tasks based on I/O conditions, and utilize variables. We will also study robotic power supplies, end of arm tooling and control systems.

628-122
Engineering Design and Development
Credits: 4.00
Engineering Design and Development is an engineering research course in which students work in teams to research, design, and construct a solution to an open-ended engineering problem. Students apply engineering principles and are guided by a community mentor. They must present progress reports, submit a final written report, and defend their solution to a panel of outside reviewers at the end of the school year.

628-123
Computer Integrated Mfg Part 1 PLTW
Credits: 2.00
The purpose of the Computer Integrated Manufacturing course is to expose students to the fundamentals of computerized manufacturing technology. The course is built around several key concepts: Principles of Manufacturing Manufacturing Processes Elements of Automation Integration of Manufacturing Elements

628-300
Machining for Maintenance
Credits: 2.00
A study and practice of manual machining to prepare students for careers in maintenance fields. Covers shop safety practices in a machine shop, the use of manual milling machines, lathes, saws and drill presses to manufacture parts to print. This class also covers the use of basic metrology instruments to determine if the parts are

to print. Calculation and application of correct cutting parameters of selected materials and tools is practiced.

628-310
Mechanical Skills I
Credits: 2.00
In this course, learners explore basic mechanical skills and repair techniques common to most industrial maintenance fields. Learners examine common types, components, operating principles, and maintenance procedures for belt drive systems, chain drive systems, clutches, shafts, and gears. Learners investigate the use and care of hand tools and small power tools, drilling, tapping, removal of broken bolts, studs, and helicoil insertion. Learners examine the type and use of fasteners and lubricants used in automated machines. Upon completion of this course, learners will be able to explain the mechanical skills and repair techniques used in industrial maintenance.

662-102
Medical Devices; Function and Use 1
Credits: 3.00
Medical instrumentation utilized in both monitoring and diagnostic capacities for the respiratory and circulatory systems are examined. The medical terminology associated with these two systems is also covered. The instrumentation for monitoring individual organs is also explored.

662-103
Diagnostic Medical Instrumentation
Credits: 3.00
Medical instrumentation utilized in both monitoring and diagnostic capacities for the Gastrointestinal, Nervous, Musculoskeletal, and Endocrine systems are examined. The medical terminology associated with these systems is also covered.

662-105
Advanced Circuits
Credits: 3.00
In this course, students apply advanced circuit theory to electrical and electronic devices and circuits. They apply complex network theorems to real-world circuits and

electronic systems. Upon completion of the course, students will be able to analyze and design complex circuits with the application of network theorems. PREREQUISITES: Take 605-114 - DC/AC II Complete course 804-197 - College Algebra and Trigonometry with Applications or a higher level math course

662-106
Advanced Electronics
Credits: 3.00
In this course, students analyze electronic devices and circuits. They use fundamental mathematical modeling and applications to design circuits with the use of semiconductor devices and operational amplifiers. Upon successful completion of the course, students will be able to analyze and design complex circuits. PREREQUISITES: Take 605-120 - Electronic Devices I Take 662-105 - Advanced Circuits; Minimum Grade C

664-100
Intro to Industrial Control Systems
Credits: 2.00
In this course, learners are introduced to basic concepts of industrial computer-controlled systems. The learner explores various types of programming using robots and PLC and participates in lab experiments designed to introduce programming principles, electronic inputs and outputs (analog and digital), and communication between system components including Ethernet protocols. Upon completion of the course, learners will be able to explain how the control processes are utilized to automate manufacturing facilities.

664-103
Motor Controls for Manufacturing
Credits: 3.00
In this course, learners examine the fundamentals of electrical AC/DC/Servo/Stepper motors and motor controls. Learners will examine electrical safety work practices and apply NFPA 70 and NEC safety codes to various situations. Motor control devices and components (motor drives, relays, timers, counters, motor contactors, overloads) including electromechanical and solid state equipment will be presented. Learners will operate motors using PLCs. Upon completion of the course, learners will apply ladder logic, wiring diagrams, and PLCs to advanced manufacturing machines.

664-104
Industrial Control System Applications
Credits: 2.00
In this course, learners develop machine process automation control systems with temperature, pressure, flow, and level controls. Learners investigate the utilization of PID loops in PLC program design. Learners program a PLC using vision, smart sensors, Servos, motor controls, and analog IO. Learners develop PLC programs including Human Machine Interface (HMI) with displays for machine input and output data. Upon completion of the course, learners will be able to build a PLC motion project for basic machine process automation control systems. COREQUISITES: Take 664-118 - PLC and HMI Programming Take 664-103 - Motor Controls for Manufacturing

664-105
Introduction to Industrial Robotics
Credits: 2.00
In this course, learners are introduced to programming techniques for industrial robots. The learner examines teach pendant programming including I/O, routines, decision making, six frames of positional operation, and robot communication. Upon completion of the course, learners will be able to operate and program industrial robots commonly used in Industry 4.0.

664-110
Intro to Mechatronics
Credits: 2.00
In this course, learners are introduced to microprocessor controlled electromechanical systems. The learner examines how individual components work, and how they are integrated into simple systems. Upon completion of the course, learners will understand what technicians do in the workplace and how industry utilizes Mechatronics in advanced manufacturing.

664-112
Fundamentals of Machining Processes
Credits: 3.00
In this course, learners examine the fundamental skills of machining processes for a career in Advanced Manufacturing Technology. Lathes, mills, and grinders will be the primary machines explored. An overview of machining processes is presented. Setup and operation, manual lathes and mills, CNC lathes and mills, basic programming using G and M codes, and tooling required for lathes and mills will be presented. Upon completion of the course, students will be able to develop a machining process plan.

664-113
Leadership for Advanced Manufacturing
Credits: 3.00
In this course, students explore how members of a team contribute to the success of project execution. They investigate work measurement analysis tools and the planning and layout of a manufacturing operation. Upon successful completion of the course, students will be able to recommend improvements to the manufacturing process.

664-115
Interpret Engineering Drawings
Credits: 2.00
In this course, learners build foundation skills needed to read and interpret industrial prints. These skills, used to interpret industrial prints, are presented in a logical order: title blocks, change blocks, shop notes, symbols, lines, orthographic views, section views, auxiliary views, pictorial views, and assembly views. Learners interpret part geometric dimensions and tolerances using basic math skills. Upon completion of the course, learners will be able to read, interpret, and apply drawing content to advanced industrial equipment. PREREQUISITES: Take 801-136 - English Composition 1 Take 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

664-116
Intro to Mfg Quality Control Systems
Credits: 2.00
In this course, learners explore skills and tools necessary to fully participate in a lean, continuous improvement manufacturing environment. These include standardized work instructions, Total Productive Maintenance (TPM), mistake-proofing, changeover

reduction, ergonomics, root cause analysis, Six Sigma, and quality management. Learners are introduced to basic statistical tools and fundamental concepts needed to improve and control industrial processes. Upon completion of the course, learners will be able to use statistical tools to improve processes, define problems, set priorities, predict outcomes, and identifiy causes of quality problems.

664-117
Materials and Processes
Credits: 2.00
In this course, learners examine the relationship between the properties and processes of various materials used in advanced industrial equipment. The properties include: mechanical strength, chemistry, and basic material characteristics. The processes include: modern manufacturing techniques, fabricating, casting, metallic finishes, plating and chip removal. Upon completion of the course, learners will be able to match materials and processes used in the manufacture of equipment.

664-118
PLC and HMI Programming
Credits: 3.00
In this course, students develop programming skills for PLCs (Programmable Logic Controllers) and HMI (Human Machine Interfaces). Students create PLC programs in various languages such as Ladder Diagram (LD), Structured Text (ST), Function Block Diagram (FBD), Sequential Function Chart (SFC). Students create visual HMI programs for manufacturing systems. Upon completion of this course, students will be able to create PLC and HMI applications for the manufacturing environment.

664-119
Advanced Manufacturing Network Systems
Credits: 3.00
In this course, students examine networks and protocols used in advanced manufacturing systems. They investigate hardware components, data transmission systems, communication lines, data sets, and interface protocols. Upon completion of the course, students will be able to analyze networking systems for advanced manufacturing.

664-120
Intro to Industrial Internet of Things
Credits: 2.00
In this course, learners are introduced to theoretical and practical topics of the Industrial Internet of Things (IIoT). The learner investigates the range of sensor and actuator devices available, ways in which they communicate and compute, methods for getting information to and from IIoT-enabled devices, and ways of visualizing and processing data acquired from the IIoT. Upon completion, learners will utilize hardware and software to construct a sensor network within an existing system and utilize industry standard tools to visualize the acquired data.

664-121
Vision and Smart Sensors
Credits: 2.00
In this course, learners will utilize 2D cameras, lighting systems and smart sensors in machine applications to provide imaging-based automatic inspection and analysis for such applications as automatic inspection, process control, and robot guidance. Learners will use vision systems to: sort good and bad parts; identify, position and orient objects images for robot guidance and orientation using edge detection; blob detection; pattern recognition; image acquisition; and bar code and QR code recognition. Learners will integrate smart sensors into PLC machine applications. Upon completion of this course learners will apply camera and smart sensors into a machine process application. PREREQUISITES: TAKE 664-118 - PLC and HMI Programming OR 605-136 - Programmable Controller System Design; Minimum Grade C Take 664-103 - Motor Controls for Manufacturing OR 664-102; Minimum Grade C

664-123
Advanced Industrial Robotics
Credits: 2.00
In this course, students explore advanced programming techniques for industrial robots. They examine interfacing peripheral devices such as programmable logic controllers, industrial sensors, and human-machine interfaces to a robot. Upon completion of the course, students will be able to apply advanced programming techniques to industrial robots. PREREQUISITES: Take 664-118 - PLC and HMI Programming Take 664-105 - Introduction to Industrial Robotics

664-124
Integrated Systems Capstone
Credits: 3.00
In this course, students design a complex integrated automation system. They use industrial robotics, programmable logic controllers, pneumatics/hydraulics, and sensors to develop the system. Upon successful completion, students will be able to design, program, troubleshoot, and improve a functional industrial automation system. PREREQUISITES: Take 664-118 - PLC and HMI Programming Take 664-123 - Advanced Industrial Robotics

801-136
English Composition 1
Credits: 3.00
This course is designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of various written documents. PREREQUISITES: Course 831-103 - College Writing, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 with a minimum grade of C or TR or achieve the required placement test score

801-196
Oral/Interpersonal Communication
Credits: 3.00
This course focuses upon developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects.

801-197
Technical Reporting
Credits: 3.00
The student will prepare and present oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. This course is designed as an advanced

communication course for students who have completed at least the prerequisite introductory writing course. PREREQUISITES: Course 801-136 - English Composition 1

801-198
Speech
Credits: 3.00
This course explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of the course.

801-202
English Composition 2
Credits: 3.00
This course builds on the writing skills learned in English Composition 1. Students develop critical reading and writing skills and produce original compositions demonstrating critical thinking ability. Students also produce a documented research project using primary and secondary sources. PREREQUISITES: Take 801-136 - English Composition 1; Minimum Grade C

801-204
Introduction to Literature
Credits: 3.00
Recommended as a first course in literary analysis, this course introduces students to the major genres of literature and addresses issues related to writing about literature and/or other texts. PREREQUISITES: Take 801-136 - English Composition 1; Minimum Grade C

801-205
Creative Writing
Credits: 3.00
This course focuses on the study and production of written work in three genres: fiction, nonfiction, and poetry. Through the workshop method of instruction, students will complete writing exercises and other projects designed to enhance creativity.

Students will also develop an awareness of their audience, build collaborative discussion skills, offer and use constructive feedback, analyze other writers' creative and critical thinking processes, and learn other skills transferable to their academic and professional lives. PREREQUISITES: Take 801-136 - English Composition 1; Minimum Grade C

801-206
Game Studies
Credits: 3.00
In this course, students examine games, game culture, and the relationship of each within broader contemporary social, medical and cultural practices using a digital humanities-based inquiry into games. They play games and examine and analyze them as rhetorical and narrative texts as well as rule-based systems. Upon completion of the course, students will be able to explain how games are influenced by culture and how they impact culture. PREREQUISITES: Course 801-136 - English Composition 1 with a minimum grade of C or TR

801-212
Ethnic Literature
Credits: 3.00
Explores questions of identity within various cultural contexts. Writers represent one or more ethnic groups working in one or more genres of literature with emphasis on developments in voice, genre, and style over chronological periods and geographical zones. Individual sections may vary in particular emphasis. PREREQUISITES: Take 801-136 - English Composition 1; Minimum Grade of C

801-221
Literature and Popular Culture
Credits: 3.00
In this course, students explore literature and popular culture. They analyze, interpret, and discuss these as artistic and cultural representation. Students examine primary texts and critical works that offer genre definitions and provide historical context. Upon completion of the course, students will be able to explain the interconnected relationship between literature and the widely shared beliefs, trends, and practices that constitute a society's popular culture. PREREQUISITES: Take 801-136 - English Composition 1

801-301
Writing Principles
Credits: 1.00
Reviews the fundamentals of grammar. Emphasizes practical application of English in business correspondence. PREREQUISITES: Course 851-760 or 851-756 - Foundations of Writing with a minimum grade of C or TR or achieve the required placement test score

801-302
Speaking Principles
Credits: 1.00
Covers techniques of verbal and non-verbal communication. Presentation techniques in informative, demonstrative, persuasive and impromptu situations are stressed.

801-500
Apprentice Communications
Credits: 1.00
Discusses basic communications concepts relating to the workplace. Skills covered are giving instructions explaining technical processes.

801-981
Written Communication Ged Ed Credit
Credits: 3.00
This course is used to award up to 12 Written Communication credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

801-982
Written Communication Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Written Communication credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the

AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

801-983
Verbal Communication Ged Ed Credit
Credits: 3.00
This course is used to award up to 12 Verbal Communication credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

801-984
Verbal Communication Ged Ed Credit
Credits: 3.00
This course is used to award up to 12 Verbal Communication credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

801-991
Communication General Education Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 801 area.

801-992
Communication General Education Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 801 area.

801-993
Communication General Education Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 801 area.

801-994
Communication General Education Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 801 area.

801-999
Communication Elective Credit
Credits: 3.00
This course is used to award up to 12 credits to students transferring to Gateway without a previous Associates degree or higher. This credit can only be used to fulfill program elective requirements and cannot be used as a substitute for any other course.

802-126
Spanish for Healthcare Providers
Credits: 3.00
In this course, students examine language that helps them become culturally-competent healthcare workers. A variety of cultural competencies are presented. Rudimentary grammar and basic vocabulary related to the healthcare environment are practiced. The course is taught primarily in English and is designed for health care students, but all students of the Spanish language will benefit from the content. Upon completion of the course students will be able to deliver basic healthcare services that meet the social, cultural, and linguistic needs of Hispanics.

802-127
Spanish for First Responders
Credits: 3.00
In this course, students demonstrate vocabulary and language structures to communicate at a basic level.Students develop a strong cultural component designed to foster effective communication, trust, mutual respect, and cultural awareness. Upon completion, the students will be able to effectively meet the social, linguistic, and cultural needs of the Hispanic community they serve.

802-201
Spanish 1
Credits: 4.00
Spanish 1 will develop and emphasize all basic language skills: listening comprehension, speaking, reading, and writing. Spanish I is the first-semester Spanish course at Gateway Technical College and is designed for those students with little or no previous knowledge of the Spanish language and for native Spanish speakers who would like to improve their grammar, reading, and writing. Classes will include an extensive study of basic vocabulary and grammatical structures as well as cultural studies of both Spain and Latin America. All Spanish classes taught at Gateway are immersion classes. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro or 831-107 - College Reading and Writing 1 or achieve the required placement test score

802-202
Spanish 2
Credits: 4.00
Spanish 2 is a continuation of Spanish I and will continue to emphasize the development of all basic language skills: listening comprehension, speaking, reading, and writing. Spanish II is the second-semester Spanish course at Gateway Technical College and is designed for those students who have completed Spanish I at Gateway or another college/university and for native Spanish speakers who would like to improve their grammar, reading, and writing. Classes will include an extensive study of basic vocabulary and grammatical structures as well as cultural studies of both Spain and Latin America. All Spanish classes taught at Gateway are immersion classes. PREREQUISITES: Complete course 802-124 OR 802-201 - Spanish 1 with a minimum grade of C or TR

802-203
Spanish 3
Credits: 4.00
Spanish 3 reviews the material taught in Spanish 1 and Spanish 2 and further develops all basic language skills: listening comprehension, speaking, reading, and writing. Spanish III is the third-semester Spanish course at Gateway Technical College and is designed for those students who have completed Spanish II at Gateway or another college/university and for native Spanish speakers who would like to improve their grammar, reading, and writing. Classes will include an extensive study of intermediate vocabulary and grammatical structures as well as cultural studies of both Spain and Latin America. All Spanish classes taught at Gateway are immersion classes. PREREQUISITES: Course 802-125 OR 802-202 - Spanish 2 with a minimum grade of C or TR

802-204
Spanish 4
Credits: 4.00
Spanish 4 is a continuation of Spanish 3 and further develops all basic language skills: listening comprehension, speaking, reading, and writing. Spanish IV is the fourth semester Spanish course at Gateway Technical College and is designed for those students who have completed Spanish 3 at Gateway or another college/university and for native Spanish speakers who would like to improve their grammar, reading, and writing. Classes will include an extensive study of intermediate vocabulary and grammatical structures as well as cultural studies of both Spain and Latin America. All Spanish classes taught at Gateway are immersion classes. PREREQUISITES: Course 802-119 OR 802-203 - Spanish 3 with a minimum grade of C or TR

802-220
Latinos in the US: Culture, Lang, & Lit
Credits: 3.00
In this course, learners explore the Latino experience in the United States. They examine the struggle to forge a unique identity within and outside of a dominant culture and language. Drawing from a variety of literary genres, learners analyze the social, linguistic, and cultural issues that Latinos confront living in the United States. Upon

completion of the course, learners will be able to explain the historical, societal, and economic context in which Latinos experience the United States.

802-981
World Languages Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 World Languages credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

802-982
World Languages Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 World Languages credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

804-115
College Technical Math 1
Credits: 5.00
Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; measurement systems; computational geometry; right and oblique triangle trigonometry; trigonometric functions on the unit circle; and operations on polynomials. Emphasis will be on the application of skills to technical problems. This course is the equivalent to College Technical Math 1A and College Technical Math 1B. PREREQUISITES: Course 834-110 - Elementary Algebra with Applications with a minimum grade of C or TR or achieve the required placement test score

804-134
Mathematical Reasoning
Credits: 3.00

All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. An activity based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving using linear, exponential and other mathematical models. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. PREREQUISITES: Complete course 854-760 - Mathematics/Pre Technical with a minimum grade C or meet required placement test score

804-135
Quantitative Reasoning
Credits: 3.00
THIS COURSE HAS BEEN REPLACED. IF IT'S A REQUIREMENT FOR YOUR PROGRAM, REGISTER FOR 804-134 MATHEMATICAL REASONING (AAS DEGREES) OR 802-250 QUANTITATIVE REASONING (AA OR AS DEGREES) INSTEAD. IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT YOUR ACADEMIC ADVISOR. PREREQUISITES: Complete course 834-109 - Pre-Algebra with a minimum grade C or TR or meet required placement test score

804-163
Intro to Mathematics
Credits: 2.00
In this course, students examine general mathematical concepts. Students investigate applications for the English and metric systems, direct measurement, algebra, and plane geometry. Upon completion of the course, students will be able to apply general mathematical concepts in a practical, industrial work environment.

804-181
Calculus 2
Credits: 4.00
Students will develop techniques for differentiation and integration of transcendental functions and use the derivative and the integral to solve certain applied problems. They will also extend calculus techniques to curves in polar coordinates and three-dimensional surfaces and form a basic understanding of infinite series and associated applications. PREREQUISITES: Complete course 804-198 - Calculus 1 with a minimum grade C

804-181
Calculus 2
Credits: 4.00
Students will develop techniques for differentiation and integration of transcendental functions and use the derivative and the integral to solve certain applied problems. They will also extend calculus techniques to curves in polar coordinates and three-dimensional surfaces and form a basic understanding of infinite series and associated applications. PREREQUISITES: Complete course 804-198 - Calculus 1 with a minimum grade C

804-189
Statistics, Introductory
Credits: 3.00
Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. PREREQUISITES: Complete one of the following courses: 804-107, 804-115 - College Technical Math 1, 804-123, 804-134 - Mathematical Reasoning, 804-135 - Quantitative Reasoning, 804-181 - Calculus 2, 804-182, 804-197 - College Algebra and Trigonometry with Applications, 804-198 - Calculus 1 or 834-110 - Elementary Algebra with Applications Minimum grade C,TR;

804-197
College Algebra and Trigonometry with Applications
Credits: 5.00
This course covers those skills needed for success in Calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatory and the binomial theorem. PREREQUISITES: Complete course 804-114 or 804-115 - College Technical Math 1 with a minimum grade of C or TR or meet required placement test score.

804-198
Calculus 1
Credits: 4.00
Students analyze and graph algebraic expressions, especially conic sections, develop an intuitive understanding of limits, derivatives, and integrals, and apply the derivative and integral to certain physical problems. PREREQUISITES: Complete course 804-197 - College Algebra and Trigonometry with Applications with a minimum grade of C or TR or meet required placement test score.

804-198
Calculus 1
Credits: 4.00
Students analyze and graph algebraic expressions, especially conic sections, develop an intuitive understanding of limits, derivatives, and integrals, and apply the derivative and integral to certain physical problems. PREREQUISITES: Complete course 804-197 - College Algebra and Trigonometry with Applications with a minimum grade of C or TR or meet required placement test score.

804-211
Calculus 3
Credits: 4.00
Students will parameterize curves and polar coordinates, vectors in the plane and in space, vectors and analytical geometry in space, vector valued functions and motion in space, multivariable functions and their partial derivatives, evaluate multiple integrals. PREREQUISITES: Course 804-210 OR 804-181 - Calculus 2 with a minimum grade of C or TR

804-211
Calculus 3
Credits: 4.00
Students will parameterize curves and polar coordinates, vectors in the plane and in space, vectors and analytical geometry in space, vector valued functions and motion in space, multivariable functions and their partial derivatives, evaluate multiple integrals. PREREQUISITES: Course 804-210 OR 804-181 - Calculus 2 with a minimum grade of C or TR

804-250
Quantitative Reasoning
Credits: 4.00
This course is intended to develop analytic reasoning and the ability to solve quantitative problems. Topics to be covered may include: construction and interpretation of graphs; descriptive statistics; geometry and spatial visualizations; math of finance; functions and modeling; probability; and logic. Appropriate use of units and dimensions, estimates, mathematical notation and available technology will be emphasized throughout the course. Note: This course satisfies Part A of the Quantitative Reasoning requirement for the UW system and is intended for students who do not plan to take any further mathematics. PREREQUISITES: Complete course 804-134 - Mathematical Reasoning with a minimum grade C or TR or meet required placement test score

804-255
Ordinary Differential Equations
Credits: 4.00
This course presents techniques for solving and approximating solutions to ordinary differential equations. Topics will include solving first-order differential equations, solving second and higher-order linear differential equations, Laplace and Fourier transform, systems of first-order linear differential equations, numerical methods, and Sturm-Liouville Theory. PREREQUISITES: Take 804-181 - Calculus 2 OR 804-210; Minimum Grade of C

804-370
Mathematics I/Applied
Credits: 2.00
Reviews the four basic mathematical operations on whole numbers, fractions and decimals. Also covers basic algebra and trigonometry related to technical fields. PREREQUISITES: Course 854-760 - Mathematics/Pre Technical with a minimum grade of C or meet placement test

804-371
Mathematics II/Applied
Credits: 1.00
Covers geometric principles along with calculations of linear, area and volume measurements. Includes interpreting and sketching graphs, the metric system, a method to solve technical conversions problems, and an introduction to statistics. PREREQUISITES: Complete course 804-370 - Mathematics I/Applied with a minimum grade of C or meet placement test score

804-502
Math 1 for Apprentice
Credits: 1.00
This course will cover fractions, decimal fractions, linear measurements (English and metric).

804-507
Intro to Math Apprenticeship
Credits: 1.00
This course will provide a foundation in the fundamentals of the application of mathematics. Emphasis is placed on achieving an understanding of general mathematical concepts, applications for the English and metric systems, direct measurement, algebra, and plane geometry. Each section will provide the student with the opportunity to apply mathematics to a practical shop situation.

804-981
Math Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Math credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

804-982
Math Gen Ed Credit
Credits: 3.00

This course is used to award up to 12 Math credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

804-983
Math Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Math credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

804-999
Math Elective Credit
Credits: 3.00
This course is used to award up to 12 credits to students transferring to Gateway without a previous Associates degree or higher. This credit can only be used to fulfill program elective requirements and cannot be used as a substitute for any other course.

806-105
Principles of Animal Biology
Credits: 4.00
Introductory course focusing on general biological principles, cell structure and function, genetics, comparative anatomy and physiology, evolution, and ecosystems. Includes dissection of various fresh and preserved materials. This course is appropriate for OTA, AODA and other allied health students. PREREQUISITES: Take course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 OR achieve placement test score

806-112
Principles of Sustainability
Credits: 3.00

Prepares the student to develop sustainable literacy, analyze the interconnections among the physical and biological sciences and environmental systems, summarize the effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce the use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal and recycling in the U.S., and analyze approaches used by your community to promote and implement sustainability. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score

806-114
General Biology
Credits: 4.00
This course introduces general biological concepts and principles. Emphasis is on cell structure and function, genetics, evolution, and taxonomical relationships. Consideration is also given to diversity among the various kingdoms. PREREQUISITES: Take course 838-105 - Reading & Study Skills, Intro OR 851-757 - College Writing Lab OR 831-107 - College Reading and Writing 1 or achieve the required placement test score

806-127
Chemistry 1
Credits: 4.00
Fundamental concepts of inorganic chemistry. Emphasizes learning the basic principles and quantitative measurements used in chemistry. Consists of three hours of lecture and one, two-hour laboratory period per week. PREREQUISITES: Complete course 804-197 - College Algebra and Trigonometry with Applications, 804-134 - Mathematical Reasoning OR 804-135 - Quantitative Reasoning

806-134
General Chemistry
Credits: 4.00
This course covers the fundamentals of chemistry. Topics covered include the metric system, problem solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water, acids, bases, and salts, and gas laws. PREREQUISITES: Course 834-109 - Pre-Algebra OR Complete 834-110 - Elementary

Algebra with Applications (Elementary Algebra- C) OR 804-115 - College Technical Math 1 (College Tech Math 1- C) OR 804-197 - College Algebra and Trigonometry with Applications (Algebra & Trig with Apps- C) OR 804-198 - Calculus 1 (Calculus 1- C) OR 804-181 - Calculus 2 (Calculus 2- C) OR 804-182 (Calculus 3- C) with a minimum grade of C or achieve the required placement test score

806-151
Supplemental Chemistry for Healthcare
Credits: 1.00
In this course, students examine basic math and chemistry principles as they relate to health professions. Students build on foundational knowledge to practice calculations in dimensional analysis and explore atoms, bonds, nomenclature, pH, and buffer systems relevant to health and the human body. Upon completion of this course, students will be able to apply these principles to health careers.

806-154
General Physics 1
Credits: 4.00
This course presents the applications and theory of basic physics principles. It emphasizes problem solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves. PREREQUISITES: Complete course 804-115 - College Technical Math 1 or a higher level math course.

806-158
Calc Physics 1 Enhancement
Credits: 1.00
This course is a mathematical enhancement that transforms General Physics 1 (4 cr) into Calc-based Physics 1 (5 cr). In this course, students will examine deriving fundamental kinematic equations, time- and position-varying forces, impulse, work, rotational motion, moments of inertia, simple-harmonic motion, and thermodynamics. PREREQUISITES: Complete course 804-198 - Calculus 1 or a higher level math course. COREQUISITES: Take 806-154 - General Physics 1

806-177
General Anatomy and Physiology
Credits: 4.00
This course examines the basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients. PREREQUISITES: Take course 838-105 - Reading & Study Skills, Intro OR 851-757 - College Writing Lab OR 831-107 - College Reading and Writing 1 or achieve the required placement score

806-179
Anatomy and Physiology, Advanced
Credits: 4.00
Advanced Anatomy and Physiology is the second semester in a two semester sequence in which normal human anatomy and physiology are studied, using a body systems approach, with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instruction is delivered both within a classroom and in a laboratory setting. Experimentation within a science lab includes analysis of cellular metabolism and the individual components of body systems, such as the nervous, neuro-muscular, cardiovascular, and urinary systems. Students examine homeostatic mechanisms and their relationship to fluids, electrolytes, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course. PREREQUISITES: Course 806-177 - General Anatomy and Physiology with a minimum grade of C or TR

806-180
Supplemental Anatomy for Advanced A&P
Credits: 1.00
In this course, students will explore the fundamentals of anatomical relationships. They will identify cardiovascular, digestive, respiratory, urinary, and reproductive structures and basic functions. Upon completion of this course, students will be able to describe the systemic connections of visceral organ systems. PREREQUISITES: Take 806-177 - General Anatomy and Physiology OR 806-195

806-186
Biochemistry/Introduction
Credits: 4.00
This introductory course is designed for students in health sciences. Selected topics of inorganic and organic chemistry are applied to fundamental areas of biochemistry. Units of study include carbohydrates, lipids and proteins, enzymes, nucleic acids, bioenergetics, metabolic pathways, and body fluids. PREREQUISITES: Take course 806-177 - General Anatomy and Physiology OR 806-134 - General Chemistry OR 806-209 - College Chemistry 1 OR 806-212 - College Chemistry 2 Minimum Grade C

806-197
Microbiology
Credits: 4.00
Topics include structure and functions of microorganisms, microbial control, infectious diseases, immunity and resistance to disease, problems of sanitation and control in relation to microbiology of air, water, food and sewage. This course is equivalent to 806-197 at other WTCS schools. PREREQUISITES: Course 806-177 - General Anatomy and Physiology or 806-105 - Principles of Animal Biology or 806-196 or 806-238 - Biology 2 with a minimum grade C or TR

806-201
Survey of Natural Science
Credits: 4.00
In this course, students survey the field of natural science. Students will examine and apply the scientific method to the physics, chemistry, biology, and health science disciplines as they demonstrate basic scientific principles through laboratory experiments and structured investigations. Upon completion of this course, students will be able to explain the uniqueness of each of these scientific disciplines and the importance of the field of natural science.

806-203
Nutrition
Credits: 3.00
This course provides an introduction to the science of nutrition. Basic concepts related to digestion and metabolism are presented. The significance of carbohydrates, lipids,

proteins, and vitamins to the human organism is discussed. The relationship of proper nutrition to selected pathological conditions throughout the human lifecycle is presented. The concept of sustainability and environmentally conscious food production is introduced. PREREQUISITES: Take course 838-105 - Reading & Study Skills, Intro OR 851-757 - College Writing Lab OR 831-107 - College Reading and Writing 1 or achieve placement test score

806-204
Human Pathophysiology
Credits: 3.00
In this course, the learner will expand and reinforce knowledge as it relates to pathology across the lifespan. The course is designed to support the health care provider in understanding from a cellular level how functional and physiologic changes occur as a result of a disease. A comprehensive understanding of anatomy and physiology is addressed and promoted. Physiological alterations of focus will include: neoplasms; congenital and genetic disorders; diseases related to the child, adult, and elderly; neurologic, cardiovascular, respiratory, digestive, genitourinary, endocrine, musculoskeletal, skin and reproductive disorders. Special emphasis is placed on promoting a climate where the learner is expected to synthesize and apply previously learned concepts to physiologic adaptations because of a defined pathology. PREREQUISITES: Take 806-177 - General Anatomy and Physiology; Minimum Grade C

806-209
College Chemistry 1
Credits: 5.00
General college chemistry includes the topics of measurement, chemical nomenclature, chemical reactions and stoichiometry, atomic structure, gas laws, thermochemistry, chemical bonding, and solution chemistry. The course is for students who need the first one of two semesters of what is typically considered freshman university-level chemistry for science majors and university transfer students. Laboratory work assists in understanding chemical concepts and developing problem-solving skills. PREREQUISITES: Complete course 834-110 - Elementary Algebra with Applications or a higher-level math course with a minimum grade of C or TR or achieve the required placement test score.

806-212
College Chemistry 2
Credits: 5.00
College Chemistry 2 is a continuation of 20-806-207. This course covers the principles and applications of organic chemistry, reaction kinetics, equilibrium, thermodynamics, electrochemistry, coordination compounds, nuclear chemistry, and environmental chemistry. Lab activities explore traditional analytical chemistry techniques using extensive computer-assisted data analysis. This course involves rigorous quantitative problem-solving, and a solid mathematics background is recommended. PREREQUISITES: Take 806-209 - College Chemistry 1; Minimum Grade of C

806-224
University Physics 2 - Calc Based
Credits: 5.00
This is the second course in a two-semester sequence using algebra, trigonometry, and calculus to introduce basic concepts of physics. Topics covered include electrostatics, electricity and magnetism, elementary electrical circuits, electromagnetic waves and the nature of light, and optics. Additional topics may include sound, fluid mechanics, Maxwell's equations, basic alternating current circuits, or selected topics in modern physics as time allows. PREREQUISITES: Take 806-154 - General Physics 1; Minimum Grade of C Take 806-158 - Calc Physics 1 Enhancement; Minimum Grade of C Take 804-198 - Calculus 1; Minimum Grade of C

806-237
Biology 1
Credits: 5.00
In this course, students examine the chemical basis of life and biological function at the molecular and cellular levels. They explore the fundamentals of biochemistry, cell biology, genetics, and molecular biology through structured lecture and laboratory activities. Upon completion of this course, students will have acquired fundamental knowledge cellular and molecular biology. PREREQUISITES: Complete course 834-110 - Elementary Algebra with Applications or a higher-level math course with a minimum grade of C or TR or achieve the required placement test score.

806-238
Biology 2
Credits: 5.00
In this course, students analyze the biological diversity of living organisms. They examine biological classification, evolution, adaptation, and ecology through structured lecture and laboratory explorations. Upon completion of this course, students will have acquired fundamental knowledge in organismal and evolutionary biology.
PREREQUISITES: Take 806-237 - Biology 1; Minimum Grade of C

806-261
Human Nutrition
Credits: 3.00
In this course, students examine the biological, psychological, and sociological basis of human nutrition. They analyze the function of nutrients as well as the utilization of nutrients in the body, including digestion, metabolism, and excretion. Students explore factors associated with obtaining necessary nutrients including nutritional needs across the lifespan, eating disorders, and food safety and security. Upon completion of this course, students will be able to assess fitness and overall wellness as it relates to the nutritional needs of individuals and communities. PREREQUISITES: Take 1 group; # Take 838-105 - Reading & Study Skills, Intro 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1; # Take OPTION-TEST; From rule TSTRFC;

806-981
Natural Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Natural Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

806-982
Natural Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Natural Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS

programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

806-983
Lab Science Gen Ed Credit
Credits: 4.00
This course is used to award up to 12 Lab Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

806-984
Lab Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Lab Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

806-992
Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 806 area.

806-993
Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 806 area.

806-994
Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 806 area.

806-999
Natural Science Elective Credit
Credits: 3.00
This course is used to award up to 12 credits to students transferring to Gateway without a previous Associates degree or higher. This credit can only be used to fulfill program elective requirements and cannot be used as a substitute for any other course.

807-201
Fitness Fundamentals
Credits: 1.00
This course is designed to provide students with the basic information and skills needed to begin a personalized exercise program and maintain a healthy and active lifestyle. Students will participate in both pre-and post-testing including the five components of fitness (muscular strength, muscular endurance, cardiorespiratory endurance, flexibility, and body composition). Throughout the course, students participate in a fitness program involving elements of cardiorespiratory endurance, strength, and flexibility.

807-205
Health and Wellness
Credits: 1.00
In this course, students explore the components of health and wellness. They assess their own health and wellness status and construct a plan for maintaining or achieving a healthy lifestyle. Upon completion of the course, students will be able to make realistic appraisals of their health and make active choices to optimize their well-being.

807-981
Health/Wellness/Pe Gen Ed Credit
Credits: 1.00
This course is used to award up to 12 Health/Wellness/Physical Education credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

807-982
Health/Wellness/Pe Gen Ed Credit
Credits: 1.00
This course is used to award up to 12 Health/Wellness/Physical Education credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-103
Think Critically & Creatively
Credits: 3.00
This course provides instruction in the vital, realistic, and practical methods of thinking which are in high demand in all occupations of substance today. Decision-making, problem-solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more are considered in-depth as the student applies specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is demonstration, discussion, project, and teamwork-based. Assignments range from the short and simple to the detailed and complex. Reality and practicality are the focuses all through the course. PREREQUISITES: Take 1 group; # Take 838-105 - Reading & Study Skills, Intro; # Take OPTION-TEST; From rule TSTRFC;

809-122
Intro to Amer Government
Credits: 3.00

An introductory course in political science concerned with the role of government in a democratic society, the constitution, Congress and the presidency, the federal court system, federal powers and functions, and the political party system of the American Government; and how they relate to contemporary society.

809-128
Marriage and Family
Credits: 3.00
This course introduces the student to the sociological aspects of marriage and family life in contemporary American society. Emphasis is on the study of cognitive, emotional, and behavioral patterns associated with courtship, love, mate selection, sexuality, and marriage. Moreover, it discusses the life span development in the family life cycle, balancing work and family, and parenting. This course is based on the premise that human attitudes, feelings, and behaviors are largely shaped and influenced by philosophy, gender, communication, and personal beliefs. Therefore, success in the institutions of marriage and family require knowledge and skills in the roles of spouse and parent and ways to apply concepts to daily life. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro or 831-107 - College Reading and Writing 1 or achieve the required placement test score

809-143
Microeconomics
Credits: 3.00
This course examines the behavior of individual decision makers, primarily consumers and firms. Topics include choices of how much to consume and to produce, the functioning of perfectly and imperfectly competitive markets, the conditions under which markets may fail, and arguments for and against government intervention. The student applies the fundamental tools of economics to real world problems. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score

809-159
Psychology, Abnormal
Credits: 3.00

This course in abnormal psychology surveys the essential features, possible causes, and assessment and treatment of the various types of abnormal behavior from the viewpoint of the major theoretical perspectives in the field of abnormal psychology. Students will be introduced to the diagnosis system of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR). In addition, the history of the psychology of abnormality will be traced. Cultural and social perspectives in understanding and responding to abnormal behavior will be explored as well as current topics and issues within abnormal psychology. PREREQUISITES: Course 809-198 - Psychology, Introduction to

809-166
Ethics: Theory & Applications, Intro to
Credits: 3.00
This course provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social, and/or professional standards of behavior and apply a systematic decision-making process to these situations. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score

809-172
Diversity Studies, Introduction to
Credits: 3.00
Race, Ethnic, and Diversity Studies is a course that draws from several disciplines to reaffirm the basic American values of justice and equality by teaching a basic vocabulary, a basic history of immigration and conquest, principles of transcultural communication, legal liability, and the value of aesthetic production to increase the probability of respectful encounters among people. In addition to an analysis of majority/minority relations in a multicultural context, the topics of ageism, sexism, gender differences, sexual orientation, people with disabilities, and the Americans with Disabilities Act (ADA) are explored. Ethnic relations are studied in global and comparative perspectives. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 with a minimum grade of C or TR or achieve the required placement test score

809-188
Psychology, Developmental
Credits: 3.00
Developmental Psychology is the study of human development throughout the lifespan. This course explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score

809-195
Economics
Credits: 3.00
An introductory course which describes, analyzes, and critiques factors which influence the overall performance of the economic system. Topics include supply-demand analysis, national income determination models, fiscal and monetary policy, money, financial institutions, the federal reserve system, unemployment, poverty, international trade, economic growth, inflation, and environmental deterioration. The links between economic problems, theory, and public policy are emphasized. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score

809-196
Sociology, Introduction to
Credits: 3.00
This course examines interpersonal relationships of humans and groups and the consequent structure of society. It details the various social processes and concepts which shape human behavior, analyzing such phenomena as organizations, deviance, race and ethnic relations, population, urbanization, social change, and social movements. Religion, education, and the family are studied. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score

809-198
Psychology, Introduction to
Credits: 3.00
This course introduces students to some of the major theories and topics of psychology, including the physiological basis of behavior, personality and learning theories, memory, states of consciousness, stress, research methods, intelligence, human development, psychopathology, and social behavior. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro, 851-757 - College Writing Lab or 831-107 - College Reading and Writing 1 or achieve the required placement test score

809-201
Macroeconomics
Credits: 3.00
Macroeconomics is an introductory course. Basic social choices regarding economic systems, basic economic aggregates, fiscal policy, the banking system, monetary policy, and international trade are the principal topics discussed in the course. Balance is drawn between theory, analysis, and a critique of the institutions that characterize modern mixed-capitalist economies. Conflicting social goals, economic constraints, and environmental concerns provide the framework through which macroeconomy is analyzed. PREREQUISITES: Course 838-105 - Reading & Study Skills, Intro or achieve the required placement test score

809-981
Humanities Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Humanities credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-982
Humanities Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Humanities credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS

programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-983
Humanities Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Humanities credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-984
Humanities Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Humanities credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-985
Social/Behavioral Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Social/Behavioral Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-986
Social/Behavioral Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Social/Behavioral Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-987
Social/Behavioral Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Social/Behavioral Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-988
Social/Behavioral Science Gen Ed Credit
Credits: 3.00
This course is used to award up to 12 Social/Behavioral Science credits to students transferring to Gateway. This credit can be used to fulfill program requirements in the AA and AS programs. It can only be used to fulfill elective requirements in other programs and cannot be used as a substitute for any other course.

809-991
Social Science General Education Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 809 area.

809-992
Social Science General Education Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 809 area.

809-993
Social Science General Education Credit
Credits: 3.00

This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 809 area.

809-994
Social Science General Education Credit
Credits: 3.00
This course is used to award up to 6 credits to students transferring to Gateway with a previous Associates degree or higher. This credit is then substituted for general education coursework in the 809 area.

809-999
Social Science Elective Credit
Credits: 3.00
This course is used to award up to 12 credits to students transferring to Gateway without a previous Associates degree or higher. This credit can only be used to fulfill program elective requirements and cannot be used as a substitute for any other course.

831-103
College Writing, Intro
Credits: 3.00
Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. PREREQUISITES: Course 851-769 or 851-756 - Foundations of Writing with a minimum grade of C or TR or achieve the required placement test score

831-107
College Reading and Writing 1
Credits: 5.00
In this course, students examine the relationship between writer, reader, text, and purpose. Students apply reading comprehension strategies as they use a text's features and content to determine the writer's message and purpose. Students apply writing conventions as they analyze their purpose for writing and design texts with features and content that makes their ideas clear to the reader. Upon completion of this

course, students will be able to explain the ideas expressed in readings, and they will be able to express their own ideas in written texts. PREREQUISITES: Meet placement test exams for Reading and Writing

834-109
Pre-Algebra
Credits: 3.00
Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra related courses. PREREQUISITES: Course 854-768 - Foundations of Prealgebra or 854-760 - Mathematics/Pre Technical with a minimum grade of C or TR or achieve the required placement test score

834-110
Elementary Algebra with Applications
Credits: 3.00
This course offers traditional algebra topics with applications. Learners develop algebraic problem solving techniques needed for technical problem solving and for more advanced algebraic studies. Topics include linear equations, exponents, polynomials, rational expressions, and roots and radicals. Successful completion of this course prepares learners to succeed in technical mathematics courses. PREREQUISITES: Course 834-109 - Pre-Algebra with minimum grade C or achieve the required placement test score

835-104
College Success
Credits: 2.00
This course provides learners with strategies to develop skills for success in college. Learners will apply self management techniques, explore resource management strategies, and learn about ways to improve personal effectiveness.

836-133
Prep for Basic Chemistry
Credits: 2.00
Introduces basic principles of chemistry including the properties of matter, atomic structure, and the classification of chemical reactions. Students learn to characterize solutions, acids, and bases, and differentiate between elements and compounds.

838-105
Reading & Study Skills, Intro
Credits: 3.00
This course provides learners with opportunities to develop study skills and expand reading skills including comprehension, fluency, and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources. PREREQUISITES: Course 858-760 or achieve the required placement test score

851-756
Foundations of Writing
Credits: 1.00
In this course, students will develop the writing skills needed in Intro to College Writing. Students will learn to structure effective sentences and compose unified, coherent paragraphs using the writing process. PREREQUISITES: Course 851-760 or achieve the required placement test score

851-757
College Writing Lab
Credits: 2.00
In this developmental course, students build foundational skills that support success in their co-requisite English Composition I class. They practice academic writing skills such as using paragraphs to organize ideas, writing with sources, and adjusting style and tone to audience and purpose. Upon completion of the course, students will be able to use resources and metacognitive strategies to monitor and assess their own writing and learning throughout the writing process. PREREQUISITES: Complete course 851-769 or 851-756 - Foundations of Writing with a minimum grade of C or TR or achieve the required placement score

851-760A
Communications Skills/Pre Technical 1CR
Credits: 1.00

851-761
Pre-Tech Vocational Communications
Credits: 2.00
In this class, you will learn to use English to achieve academically in Gateway vocational programs. Advanced ESL students will learn to: use English to interact in the college classroom, provide subject matter information in spoken and written form, and use learning strategies to better understand academic knowledge taught at Gateway vocational classrooms. Your English language skills will grow as you gain the self-confidence to succeed in college courses.

851-764
Communication Skills Review
Credits: 1.00

854-760
Mathematics/Pre Technical
Credits: 2.00
Pre-Technical Mathematics is a course designed to enable students to improve and enhance their mathematical skills in order to deal more effectively with mathematics in a future program. Material to be covered includes basic operations with fractions, decimals, and percents. Also included will be work with pre-geometry (measurement involving perimeter, circumference, area and volume).

854-761
Algebra/Pre Technical
Credits: 2.00
A basic algebra course which covers algebraic expressions, polynomials, factoring, operations with integers, solving equations, and word problems. PREREQUISITES: Course 854-760 - Mathematics/Pre Technical with a minimum grade of C or TR or achieve the required placement test score

854-763
Mathematics Review
Credits: 1.00

854-765
Mathematics Review for the Sciences
Credits: 1.00

854-766
Algebra Review
Credits: 1.00

854-769
Algebra Pre-College
Credits: 2.00
Pre College Algebra is a beginning and/or review course which prepares the student for college level mathematics. The course covers basic mathematical operations applied to signed numbers and algebraic functions and also includes operations with polynomials. Factoring, linear and quadratic equations, formulas, and formula manipulation are also included. PREREQUISITES: Course 854-761 - Algebra/Pre Technical with a minimum grade of C or TR or achieve the required placement test score

856-760
Science/PreTechnical
Credits: 2.00

856-760A
Science/Pretechnical Review- Animal Biology
Credits: 1.00
This course is a review of basic scientific concepts and scientific methods in the areas of animal biology, to prepare students for postsecondary science courses.

856-760B
Science/Pretechnical Review- Plant Biology
Credits: 1.00
This course is a review of basic scientific concepts and scientific methods in the field of plant biology, to prepare students for postsecondary science courses.

861-134
Beginning Listening and Note Taking
Credits: 4.00
In this course, students will learn and practice beginning active listening skills with a partner, in a small group and in front of the class. Students will distinguish elements of beginning communication situations. Students will acquire beginning skills to listen and respond in real time with some prior knowledge and preparation. Students will use a variety of note-taking techniques to practice basic organization and main points in listening comprehension. They will demonstrate beginning listening comprehension by creating graphic formats relevant to lecture topics. Upon completion of the course, students will be able to listen and demonstrate beginning comprehension of a conversation with one or more partners and in front of the class. Students will be able to listen and respond to multimedia presentations for beginning academic and professional situations. Students will restate understanding orally and in writing and clarify comprehension gaps.

861-135
Beginning American College Culture
Credits: 4.00
In this course, students will integrate their beginning skills in reading, vocabulary, writing, grammar, speaking, and listening to acquire basic knowledge of the American College Culture and improve study skills. They will explore beginning higher education vocabulary and college student roles. They will be introduced to American societal rules and perceptions about personal responsibility, especially in the higher education

context. Students will interact with the American College Culture in real time in person. Upon completion of the course, students will be able to successfully navigate college interactions in person. With preparation and support, students will be able to ask basic questions, seek answers, summarize interaction outcomes and formulate follow up questions and actions. Students will also be able to demonstrate beginning personal effectiveness in the American College Culture through the use of several study techniques for learning, memory and test preparation.

861-141
Intermediate Reading/Vocabulary
Credits: 4.00
In this course, students will use reading strategies, such as skimming and scanning, to increase reading comprehension and speed in academic and professional settings. Students will examine both oral and silent reading strategies, along with memory training techniques. Students will acquire skills to draw inferences and conclusions, and to distinguish fact from opinion. Students will interpret graphs, tables and diagrams. Students will increase vocabulary, develop word comprehension strategies and use multimedia resources, such as dictionaries and glossaries, independently. Upon completion of the course, students will be able to read and summarize academic and nonfiction texts by paraphrasing orally and in writing. Students will be able to use reading and vocabulary strategies, along with memory techniques, to study and prepare for exams.

861-142
Intermediate Grammar and Writing
Credits: 4.00
In this course, students will learn to use a variety of effective sentence structures to compose unified, coherent paragraphs using the standard American rhetorical style and will write multi-paragraph documents. Students will acquire intermediate grammar, punctuation and spelling skills to write clearly and effectively in academic or professional settings. Students will be introduced to American academic standards of intellectual property. Upon completion of the course, students will be able to write multiple drafts using the writing process, edit writing, and produce grammatically correct sentences, well-structured paragraphs and 5-paragraph essays utilizing standard punctuation and spelling rules. Students will be able to write paragraphs and essays both in and out of class. Students will be able to define American concepts of intellectual property, including citations, and plagiarism.

861-143
Intermediate Speak/Pronunciation
Credits: 4.00
In this course, students will learn and practice conversational skills with a partner, in a small group and will speak in front of the class. Students will acquire skills to speak extemporaneously and with preparation, including multimedia presentation tools. Students will develop intermediate level pronunciation knowledge, awareness and skills for clear communication. Expanding idiomatic language, students will develop paraphrasing techniques and the ability to express both facts and opinions. They will explore speaking strategies that show awareness of culture and bias. Upon completion of the course, students will be able to speak clearly and confidently with one or more conversational partners in academic and professional settings. They will be able to speak extemporaneously and prepare and give an intermediate level presentation.

861-144
Intermediate Listen/Note-Taking
Credits: 4.00
In this course, students will learn and practice active listening skills with a partner, in a small group and in front of the class. Students will analyze elements of communication situations, including nonverbals, gender and cultural differences. Students will acquire skills to listen and respond in real time with and without prior knowledge and preparation. Students will develop a variety of note-taking techniques to increase speed and accuracy in listening comprehension. They will demonstrate listening comprehension by paraphrasing in speaking and writing. Upon completion of the course, students will be able to listen and demonstrate comprehension of a conversation with one or more partners and in front of the class. Students will be able to listen and respond to multimedia presentations for academic and professional situations. Students will be able to distinguish between facts and opinions and interpret nonverbal communication and body language.

861-145
Intermediate American College Culture
Credits: 4.00
In this course, students will integrate their skills in reading, vocabulary, writing, grammar, speaking, and listening to acquire knowledge of the American College

Culture and improve study skills. They will explore higher education vocabulary and college student roles. They will learn American societal rules and perceptions about personal responsibility, dependence, independence, interdependence, passivity, aggression and assertiveness. Students will interact with the American College Culture in real time in person, by phone and online. Students will be able to ask questions, seek answers, summarize interaction outcomes and formulate follow up questions and actions. Students will also be able to demonstrate personal effectiveness in the American College Culture through the use of a variety of study techniques for learning, memory and test preparation.

861-151
Advanced Reading and Vocabulary
Credits: 4.00
In this course, students will use advanced reading strategies, such as connecting prior knowledge and context, to increase reading comprehension and speed in academic and professional settings. Students will examine both oral and silent reading strategies, along with memory training techniques. Students will make inferences and conclusions and distinguish fact from opinion. Students will interpret graphs, tables and diagrams. Students will increase vocabulary, use word comprehension strategies and multimedia resources, such as dictionaries and glossaries, independently. Upon completion of the course, students will be able to read and summarize academic and nonfiction texts by paraphrasing orally and in writing. Students will be able to use advanced reading and vocabulary strategies along with memory techniques to study and prepare for exams.

861-152
Advanced Grammar and Writing
Credits: 4.00
In this course, students will learn to use a variety of effective sentence structures to compose unified, coherent paragraphs using the standard American rhetorical style and will write multi-paragraph documents and essays. Students will acquire advanced grammar, punctuation and spelling skills to write clearly and effectively in academic or professional settings. Students will practice American academic standards of intellectual property. Upon completion of the course, students will be able to write multiple drafts using the writing process, edit writing, and produce grammatically correct sentences, well-structured paragraphs and 5-paragraph essays utilizing standard punctuation and spelling rules. Students will be able to write paragraphs and

essays both in and out of class. Students will be able to define American concepts of intellectual property, including citations and plagiarism.

861-153
Advanced Speaking and Pronunciation
Credits: 4.00
In this course, students will learn and practice advanced conversational skills with partners, in small groups, and will speak in front of the class. Students will acquire skills to speak extemporaneously and with preparation, including using multimedia presentation tools. Students will develop advanced level pronunciation knowledge, awareness and skills for clear communication. Expanding idiomatic language, students will develop paraphrasing techniques and the ability to express both facts and opinions. They will explore speaking strategies that show awareness of culture and bias. Upon completion of the course, students will be able to speak clearly and confidently with one or more conversational partners in academic and professional settings. They will be able to speak extemporaneously and prepare and give an advanced level presentation.

861-155
Advanced American College Culture
Credits: 4.00
In this course, students will integrate their advanced skills in reading, vocabulary, writing, grammar, speaking, and listening to acquire knowledge of the American college culture and improve study skills. They will explore higher education vocabulary and college student roles. They will learn American societal rules and perceptions about personal responsibility, dependence, independence, interdependence, passivity, aggression and assertiveness. Students will interact independently with the American college culture in real time in person, by phone and online. Upon completion of the course, students will be able to successfully navigate college interactions in person, by phone and online. Students will be able to ask questions, seek answers, summarize interaction outcomes and formulate follow up questions and actions. Students will also be able to demonstrate personal effectiveness in the American college culture through the use of a variety of study techniques for learning, memory and test preparation.

863-110
Intensive English Program Support
Credits: 3.00
This course provides support to students who are enrolled in the Intensive English Program (IEP). Students will enhance their academic skills needed to complete the IEP program successfully. Through their participation in this course, students develop skills they will use in their further IEP study.

863-111
Intensive English Development
Credits: 3.00
In this course, students engage in speaking, listening, reading, writing, and grammar activities through focused and immersive instruction. Students practice these language skills using real-world texts with a goal to accelerate second language learning. Instruction is designed and delivered to support students' achievements of significant progress that enhances their English language competency skills for academic and professional purposes.

863-131
Beginning Reading and Vocabulary
Credits: 4.00
In this course, students will use beginning reading strategies, such as activating prior knowledge, pre-learning vocabulary, skimming and scanning, to increase reading comprehension and speed in academic and professional settings. Students will examine both oral and silent reading strategies, along with memory training techniques. Students will explain beginning graphs, tables and diagrams. Students will increase beginning vocabulary, develop word comprehension strategies and use multimedia resources, such as dictionaries and glossaries. Upon completion of the course, students will be able to read and summarize short beginning academic and nonfiction texts by paraphrasing orally and in writing. Students will be able to use basic reading and vocabulary strategies, along with memory techniques, to study and prepare for exams.

863-132
Beginning Grammar and Writing
Credits: 4.00

In this course, students will learn to use several basic sentence structures to compose paragraphs using the standard American rhetorical style. Students will acquire beginning grammar, punctuation and spelling skills to write for some academic and professional settings. Upon completion of the course, students will be able to write single paragraphs using the writing process. They will edit their writing, and produce grammatically correct sentences, combined into well-structured paragraphs. They will demonstrate knowledge of some standard punctuation and spelling rules. Students will be able to write beginning paragraphs both in and out of class.

863-133
Beginning Speaking / Pronunciation
Credits: 4.00
In this course, students will learn and practice conversational skills with partners, in small groups, and will begin to speak in front of the class. Students will acquire skills to give short academic presentations. Students will develop beginning level pronunciation knowledge, awareness and skills for clear communication. Students will clarify understanding using beginning communication strategies. They will ask and answer questions about themselves and their opinions. Upon completion of the course, students will be able to speak clearly with one or more conversational partners in some academic and professional settings. They will be able to prepare and deliver a beginning level presentation.

863-134
Beginning Listening and Note Taking
Credits: 4.00
In this course, students will learn and practice beginning active listening skills with a partner, in a small group and in front of the class. Students will distinguish elements of beginning communication situations. Students will acquire beginning skills to listen and respond in real time with some prior knowledge and preparation. Students will use a variety of note-taking techniques to practice basic organization and main points in listening comprehension. They will demonstrate beginning listening comprehension by creating graphic formats relevant to lecture topics. Upon completion of the course, students will be able to listen and demonstrate beginning comprehension of a conversation with one or more partners and in front of the class. Students will be able to listen and respond to multimedia presentations for beginning academic and professional situations. Students will restate understanding orally and in writing and clarify comprehension gaps.

863-135
Beginning American College Culture
Credits: 4.00
In this course, students will integrate their beginning skills in reading, vocabulary, writing, grammar, speaking, and listening to acquire basic knowledge of the American College Culture and improve study skills. They will explore beginning higher education vocabulary and college student roles. They will be introduced to American societal rules and perceptions about personal responsibility, especially in the higher education context. Students will interact with the American College Culture in real time in person. Upon completion of the course, students will be able to successfully navigate college interactions in person. With preparation and support, students will be able to basically ask questions, seek answers, summarize interaction outcomes and formulate follow up questions and actions. Students will also be able to demonstrate beginning personal effectiveness in the American College Culture through the use of several study techniques for learning, memory and test preparation.

863-141
Intermediate Reading/Vocabulary
Credits: 4.00
In this course, students will use reading strategies, such as skimming and scanning, to increase reading comprehension and speed in academic and professional settings. Students will examine both oral and silent reading strategies, along with memory training techniques. Students will acquire skills to draw inferences and conclusions, and to distinguish fact from opinion. Students will interpret graphs, tables and diagrams. Students will increase vocabulary, develop word comprehension strategies and use multimedia resources, such as dictionaries and glossaries, independently. Upon completion of the course, students will be able to read and summarize academic and nonfiction texts by paraphrasing orally and in writing. Students will be able to use reading and vocabulary strategies, along with memory techniques, to study and prepare for exams.

863-142
Intermediate Grammar and Writing
Credits: 4.00

In this course, students will learn to use a variety of effective sentence structures to compose unified, coherent paragraphs using the standard American rhetorical style and will write multi-paragraph documents. Students will acquire intermediate grammar, punctuation and spelling skills to write clearly and effectively in academic or professional settings. Students will be introduced to American academic standards of intellectual property. Upon completion of the course, students will be able to write multiple drafts using the writing process, edit writing, and produce grammatically correct sentences, well-structured paragraphs and 5-paragraph essays utilizing standard punctuation and spelling rules. Students will be able to write paragraphs and essays both in and out of class. Students will be able to define American concepts of intellectual property, including citations, and plagiarism.

863-143
Intermediate Speak/Pronunciation
Credits: 4.00
In this course, students will learn and practice conversational skills with a partner, in a small group and will speak in front of the class. Students will acquire skills to speak extemporaneously and with preparation, including multimedia presentation tools. Students will develop intermediate level pronunciation knowledge, awareness and skills for clear communication. Expanding idiomatic language, students will develop paraphrasing techniques and the ability to express both facts and opinions. They will explore speaking strategies that show awareness of culture and bias. Upon completion of the course, students will be able to speak clearly and confidently with one or more conversational partners in academic and professional settings. They will be able to speak extemporaneously and prepare and give an intermediate level presentation.

863-144
Intermediate Listen/Note-Taking
Credits: 4.00
In this course, students will learn and practice active listening skills with a partner, in a small group and in front of the class. Students will analyze elements of communication situations, including nonverbals, gender and cultural differences. Students will acquire skills to listen and respond in real time with and without prior knowledge and preparation. Students will develop a variety of note-taking techniques to increase speed and accuracy in listening comprehension. They will demonstrate listening comprehension by paraphrasing in speaking and writing. Upon completion of the course, students will be able to listen and demonstrate comprehension of a

conversation with one or more partners and in front of the class. Students will be able to listen and respond to multimedia presentations for academic and professional situations. Students will be able to distinguish between facts and opinions and interpret nonverbal communication and body language.

863-145
Intermediate American College Culture
Credits: 4.00
In this course, students will integrate their skills in reading, vocabulary, writing, grammar, speaking, and listening to acquire knowledge of the American College Culture and improve study skills. They will explore higher education vocabulary and college student roles. They will learn American societal rules and perceptions about personal responsibility, dependence, independence, interdependence, passivity, aggression and assertiveness. Students will interact with the American College Culture in real time in person, by phone and online. Students will be able to ask questions, seek answers, summarize interaction outcomes and formulate follow up questions and actions. Students will also be able to demonstrate personal effectiveness in the American College Culture using a variety of study techniques for learning, memory and test preparation.

863-151
Advanced Reading and Vocabulary
Credits: 4.00
In this course, students will use advanced reading strategies, such as connecting prior knowledge and context, to increase reading comprehension and speed in academic and professional settings. Students will examine both oral and silent reading strategies, along with memory training techniques. Students will make inferences and conclusions and distinguish fact from opinion. Students will interpret graphs, tables and diagrams. Students will increase vocabulary, use word comprehension strategies and multimedia resources, such as dictionaries and glossaries, independently. Upon completion of the course, students will be able to read and summarize academic and nonfiction texts by paraphrasing orally and in writing. Students will be able to use advanced reading and vocabulary strategies along with memory techniques to study and prepare for exams.

863-152
Advanced Grammar and Writing
Credits: 4.00
In this course, students will learn to use a variety of effective sentence structures to compose unified, coherent paragraphs using the standard American rhetorical style and will write multi-paragraph documents and essays. Students will acquire advanced grammar, punctuation and spelling skills to write clearly and effectively in academic or professional settings. Students will practice American academic standards of intellectual property. Upon completion of the course, students will be able to write multiple drafts using the writing process, edit writing, and produce grammatically correct sentences, well-structured paragraphs and 5-paragraph essays utilizing standard punctuation and spelling rules. Students will be able to write paragraphs and essays both in and out of class. Students will be able to define American concepts of intellectual property, including citations and plagiarism.

863-153
Advanced Speaking and Pronunciation
Credits: 4.00
In this course, students will learn and practice advanced conversational skills with partners, in small groups, and will speak in front of the class. Students will acquire skills to speak extemporaneously and with preparation, including using multimedia presentation tools. Students will develop advanced level pronunciation knowledge, awareness and skills for clear communication. Expanding idiomatic language, students will develop paraphrasing techniques and the ability to express both facts and opinions. They will explore speaking strategies that show awareness of culture and bias. Upon completion of the course, students will be able to speak clearly and confidently with one or more conversational partners in academic and professional settings. They will be able to speak extemporaneously and prepare and give an advanced level presentation.

863-154
Advanced Listening and Note-Taking
Credits: 4.00
In this course, students will learn and practice advanced active listening skills with a partner, in a small group and in front of the class. Students will analyze elements of communication situations, including nonverbals, gender and cultural differences. Students will acquire skills to listen and respond in real time with and without prior

knowledge and preparation. Students will develop a variety of note-taking techniques to increase speed and accuracy in listening comprehension. They will demonstrate listening comprehension by paraphrasing in speaking and writing. Upon completion of the course, students will be able to listen and demonstrate comprehension of a conversation with one or more partners and in front of the class. Students will be able to listen and respond to multimedia presentations for academic and professional situations. Students will be able to distinguish between facts and opinions and interpret communication and body language.

863-155
Advanced American College Culture
Credits: 4.00
In this course, students will integrate their advanced skills in reading, vocabulary, writing, grammar, speaking, and listening to acquire knowledge of the American college culture and improve study skills. They will explore higher education vocabulary and college student roles. They will learn American societal rules and perceptions about personal responsibility, dependence, independence, interpendence, passivity, aggression and assertiveness. Students will interact independently with the American college culture in real time in person, by phone and online. Upon completion of the course, students will be able to successfully navigate college interactions in person, by phone and online. Students will be able to ask questions, seek answers, summarize interaction outcomes and formulate follow up questions and actions. Students will also be able to demonstrate personal effectiveness in the American college culture through the use of a variety of study techniques for learning, memory and test preparation.

890-100
College Success Skills
Credits: 1.00
Designed to promote student academic success. Through a variety of awareness activities, students are introduced to study skills, time management techniques, health-related and relationship-building skills, as well as to programs, services, policies and procedures offered by Gateway.

890-154
Alternative Learning Portfolio
Credits: 3.00

Learners will document proficiency in relevant knowledge and skills to substitute for designated course requirements from sources such as educational experience, work experience, and other personal activities. Course may be substituted for a program requirement at the recommendation of Disability Support Services faculty and approval of the dean and the provost's office.

890-155
Gateway to Success
Credits: 1.00
In this course, students explore the Gateway Technical College community. They examine college resources and services, investigate skills that lead to academic success, and identify strategies for achieving educational and personal goals.

890-205
Gateway to Engineering
Credits: 2.00
In this course, students will ascertain how to be successful in an undergraduate engineering program. They will explore problem solving strategies and career paths for a variety of engineering specialties. Upon completion of this course, students will be prepared to choose an engineering specialty and select elective engineering courses relevant to their engineering career goals.

890-299
Gateway to Research
Credits: 1.00
In this course, students engage in an independent study project or research experience within the discipline of a faculty mentor. They select a topic and conduct literature research. Students may implement a qualitative or quantitative methodology. Upon completion of the course, students will be able to explain the research process and discuss their findings.

890-991
Elective Credit Associate Degree
Credits: 1.00

This course is used to award up to 12 Elective credits to students transferring to Gateway or receiving Credit for Prior Learning. This credit can only be used to fulfill elective requirements and cannot be used as a substitute for any other course requirements.

890-992
Elective Credit Associate Degree
Credits: 1.00
This course is used to award up to 12 Elective credits to students transferring to Gateway or receiving Credit for Prior Learning. This credit can only be used to fulfill elective requirements and cannot be used as a substitute for any other course requirements.

890-993
Elective Credit Associate Degree
Credits: 1.00
This course is used to award up to 12 Elective credits to students transferring to Gateway or receiving Credit for Prior Learning. This credit can only be used to fulfill elective requirements and cannot be used as a substitute for any other course requirements.

2026-2027 Gateway Technical College
Associate Degree Programs

Program	Location
Most program courses taught at listed location – some travel may be required to other locations. Locations may differ for full-time and part-time. General Studies courses are offered on all campuses. Most programs may be started on any campus. (current as of date printed)	
Accounting (10-101-1)	Online
Administrative Professional (10-106-6)	Online
Advanced Manufacturing Technology (10-664-2)	iMET
Aeronautics – Pilot Training (10-402-1)	Horizon
Architectural – Structural Engineering Technician (10-614-6)	Elkhorn, iMET
Automotive Technology (10-602-3)	Horizon
Business Management (10-102-3)	Online
Civil Engineering Technology – Highway Technology (10-607-4)	Elkhorn, iMET
Criminal Justice Studies (10-504-5)	Kenosha, Online
Culinary Arts (10-316-1)	Elkhorn, Racine
Diesel Equipment Technology (10-412-1)	Horizon
Early Childhood Education (10-307-1)	Racine, Online
Electrical Engineering Technology (10-662-1)	iMET
Foundations of Teacher Education (10-522-2)	Online
Funeral Service (10-528-1) (Shared program - Milwaukee Area Technical College)	Elkhorn, Kenosha, Racine
Graphic Design (10-201-1)	Elkhorn, iMET, Online
Greenhouse Operations (10-001-6)	Kenosha
Human Resources (10-116-1)	Online
Human Services Associate (10-520-3)	Online
Individualized Technical Studies (10-825-1)	
Information Technology – AI Data Specialist (10-156-3)	Online
Information Technology – Computer Support Specialist (10-154-3)	Racine
Information Technology – Cybersecurity Specialist (10-151-2)	Racine, Online
Information Technology – Network Specialist (10-150-2)	Racine, Online
Information Technology – Software Developer (10-152-1)	Racine, Online
Interior Design (10-304-1)	Kenosha
Landscape Horticulture (10-001-4)	Kenosha
Legal Studies/Paralegal (10-110-1)	Online
Liberal Arts – Associate of Arts (20-800-1)	Elkhorn, Kenosha, Racine
Liberal Arts – Associate of Science (20-800-2)	Elkhorn, Kenosha, Racine
Marketing (10-104-3)	Online
Medical Laboratory Technician (10-513-1)	Racine
Nursing – Associate Degree (ADN/RN) (10-543-1)	Elkhorn, Kenosha, Racine
Paramedic Technician (10-531-1)	HERO
Physical Therapist Assistant (10-524-1)	Kenosha
Respiratory Therapy (10-515-1)	Kenosha
Supply Chain Management (10-182-1)	Online
Surgical Technology (10-512-1)	Kenosha
Technical Studies – Journeyworker (10-499-5)	
Veterinary Technician (10-098-1)	Elkhorn

2026-2027 Gateway Technical College
Technical Diploma Programs

Program	Location

Most program courses taught at listed location – some travel may be required to other locations. Locations may differ for full-time and part-time. General Studies courses are offered on all campuses. Most programs may be started on any campus. (current as of date printed)

Advanced EMT (30-531-6)	**HERO**
Accounting Assistant (31-101-1)	**Online**
Automotive Maintenance Technician (31-404-3)	**Horizon**
Barber Technologist (30-502-5)	**Kenosha**
Building Trades-Carpentry (31-475-1)	**Kenosha**
Business Operations (31-102-5)	**Online**
CNC Production Technician (31-444-2)	**Elkhorn, iMET**
CNC Programmer (31-444-3)	**Elkhorn, iMET**
Construction Management Technician (31-455-1)	**Elkhorn, iMET**
Cosmetology (31-502-1)	**Burlington, Kenosha, Racine**
Criminal Justice – Law Enforcement 720 Academy (30-504-2)	**Kenosha**
Culinary Assistant (31-316-1)	**Elkhorn, Racine**
Dental Assistant (31-508-1)	**Racine**
Diesel Equipment Mechanic (31-412-1)	**Horizon**
Electromechanical Maintenance Technician (31-620-3)	**Lakeview, iMET**
Emergency Medical Technician (30-531-3)	**HERO, Kenosha, Racine**
EMT-Paramedic (31-531-1)	**HERO**
Facilities Maintenance (31-443-2)	**Kenosha**
Fire Science (30-503-5)	**HERO**
Horticulture Technician (31-001-1)	**Elkhorn, Kenosha**
IT – Computer Support Technician (31-154-6)	**Racine**
Medical Assistant (31-509-1)	**Online**
Nursing Assistant (30-543-1)	**Elkhorn, Kenosha, Racine**
Office Assistant (31-106-1)	**Online**
Practical Nursing (31-543-1)	**Elkhorn, Racine**
Refrig, Air Conditioning and Heating Service Technician HVAC-R (31-401-1)	**Elkhorn, Kenosha**
Truck Driving (30-458-1)	**Horizon**
Veterinary Assistant (31-098-3)	**Elkhorn**
Welding (31-442-1)	**Elkhorn, Racine**
Welding/Maintenance and Fabrication (30-442-2)	**Elkhorn, Racine**

Apprenticeship Programs

Arborist Apprentice (50-001-1)
Barbering Apprentice (50-502-5)
Construction Electrical Apprentice (50-413-2)
Cosmetology Apprentice (50-502-1)
Culinary Apprentice (50-316-3)
Facilities Maintenance Technician Apprentice (50-481-1)
HVAC Apprentice (50-401-9)
Machinist Apprentice (50-420-2)
Maintenance Technician Apprentice (50-464-1)
Mechatronics Technician Apprentice (50-620-1)
Plumbing Apprentice (50-427-3)
Tool & Die Apprentice (50-439-3)

Accounting (10-101-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/accounting. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*101-114	4	Accounting Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	*101-128	3	QuickBooks Online	Coreq: 101-114 OR 101-112	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	103-143	3	Computers for Professionals			F/S/SU
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*101-119	3	Payroll Accounting			F/S/SU
2	*101-106	3	Accounting Spreadsheet Applications			F/S/SU
2	*101-104	4	Income Tax Accounting			F/S/SU
2	*101-116	3	Corporate Accounting	Prereq: 101-114; Coreq: 804-134 OR 804-135; 801-136; 103-143 OR 103-102	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			F/S/SU
3	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Accounting (10-101-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*102-160	3	Business Law			F/S/SU
4	*101-121	4	Intermediate Accounting	Prereq: 804-134 OR 804-135; 801-136; 101-116		F/S/SU
4	*101-131	4	Management Accounting	Prereq: 101-114		F/S/SU
4	*101-129	3	Integrated Accounting & Analytics	Prereq: 101-106; 101-116		F/S/SU
5	*101-105 **OR** *101-103	2 2	Accounting Career Readiness **OR** Internship for Accounting	Coreq: 101-121; 101-131 Prereq: Instr. Consent; Coreq: 101-121		F/S/SU
5	*101-155	3	Financial Analysis/ Management	Prereq: 101-106; Coreq: 101-121		F/S/SU
5	*101-107	3	Accounting Capstone	Prereq: 101-104; 101-119; 101-121; 101-131; 101-154 OR 101-128; Coreq: 101-155		F/S/SU
5	809-198	3	Psychology, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
5	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F/S/SU

Minimum Program Total Credits Required: 64

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Accounting (10-101-1)

Accounting covers the principles of accounting, including budgeting, financial analysis, cost accounting, tax preparation, and other commercial aspects. Students are taught to interpret figures and what they actually mean to the company or organization. Entry level jobs for the accounting graduate include junior or assistant accountant, bookkeeper, cost accountant, property accountant, and payroll accountant. If taken full-time, this is a two-year course of study.

Program Learning Outcomes

Graduates will be able to:

1. Apply Generally Accepted Accounting Principles to financial transactions throughout the accounting cycle.
2. Analyze financial and business information to support planning and decision-making.
3. Use a commercial software package to record and report financial information.
4. Prepare payroll journal entries, related reports and filings.
5. Perform cost accounting calculations, journal entries, reporting, and analysis tasks.
6. Perform individual tax accounting preparation, reporting and analysis tasks.
7. Apply employability skills for entry into the accounting field.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 64 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

114-101 Personal Financial Planning	102-122 Investments
801-197 Technical Reporting	809-172 Diversity Studies, Intro to
804-189 Introductory Statistics	809-196 Sociology, Intro to

Notes

1. Accounting is a laptop program. Students will need a Windows-Based computer (with a hard drive) for use in the classroom. Please note MAC computers are not compatible with some of the required software.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Accounting (10-101-1)

Associate of Applied Science

Effective 2026/2027

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O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*101-114	4	Accounting Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	103-143	3	Computers for Professionals			F/S/SU
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*101-128	3	QuickBooks Online	Coreq: 101-114 OR 101-112	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
2	*101-119	3	Payroll Accounting			F/S/SU
3	*101-116	3	Corporate Accounting	Prereq: 101-114; Coreq: 804-134 OR 804-135; 801-136; 103-143 OR 103-102	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
4	*102-160	3	Business Law			F/S/SU
4	*101-106	3	Accounting Spreadsheet Applications			F/S/SU
4	*101-104	4	Income Tax Accounting			F/S/SU
5	*101-121	4	Intermediate Accounting	Prereq: 804-134 OR 804-135; 801-136; 101-116		
5	*101-131	4	Management Accounting	Prereq: 101-114		F/S/SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Accounting (10-101-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
6	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			F/S/SU
6	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
7	*101-129	3	Integrated Accounting & Analytics	Prereq: 101-106; 101-116		F/S/SU
7	*101-155	3	Financial Analysis/ Management	Prereq: 101-106; Coreq: 101-121		F/S/SU
7	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F/S/SU
8	809-198	3	Psychology, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
8	*101-105 **OR** *101-103	2	Accounting Career Readiness **OR** Internship for Accounting	Coreq: 101-121; 101-131 Prereq: Instructor Consent; Coreq: 101-121		F/S/SU
8	*101-107	3	Accounting Capstone	Prereq: 101-104; 101-119; 101-121; 101-131; 101-154 OR 101-128; Coreq: 101-155		F/S/SU

Minimum Program Total Credits Required: 64

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Accounting (10-101-1)

Accounting covers the principles of accounting, including budgeting, financial analysis, cost accounting, tax preparation, and other commercial aspects. Students are taught to interpret figures and what they actually mean to the company or organization. Entry level jobs for the accounting graduate include junior or assistant accountant, bookkeeper, cost accountant, property accountant, and payroll accountant. If taken full-time, this is a two-year course of study.

Program Learning Outcomes

Graduates will be able to:

1. Apply Generally Accepted Accounting Principles to financial transactions throughout the accounting cycle.
2. Analyze financial and business information to support planning and decision-making.
3. Use a commercial software package to record and report financial information.
4. Prepare payroll journal entries, related reports and filings.
5. Perform cost accounting calculations, journal entries, reporting, and analysis tasks.
6. Perform individual tax accounting preparation, reporting and analysis tasks.
7. Apply employability skills for entry into the accounting field.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 64 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

114-101 Personal Financial Planning	102-122 Investments
801-197 Technical Reporting	809-172 Diversity Studies, Intro to
804-189 Introductory Statistics	809-196 Sociology, Intro to

Notes

1. Accounting is a laptop program. Students will need a Windows-Based computer (with a hard drive) for use in the classroom. Please note MAC computers are not compatible with some of the required software.

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Administrative Professional (10-106-6)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/administrative-professional. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*106-021	3	Business Office Fundamentals			F
1	*106-028	3	Office Technologies Essentials			F
1	*106-137	3	Keyboarding Applications		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*106-019	1	Admin. Services Internship I	Prereq: Instr. Consent & 106-137; Coreq: 106-024; 801-136; 804-134 OR 804-135		S
2	*106-024	3	Professionalism in Business		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*106-025	3	Spreadsheets for Business	Prereq: 106-137		S
2	*106-026	3	Business Publications	Prereq: 106-137		S
2	*106-030	3	Word Processing for Business	Prereq: 106-137		S
2	101-112 **OR** 101-114	3 4	Accounting for Business **OR** Accounting Principles			S

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Administrative Professional (10-106-6) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
3	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
3	801-196	3	Oral/Interpersonal Communication			SU
4	*106-022	3	Info Management for Business	Prereq: 106-137		F
4	*106-029	3	Presentations for Business	Prereq: 106-137		F
4	*106-190	3	Administrative Office Procedures	Prereq: 106-025		F
4	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*106-006	3	Business Communication Skills	Prereq: 106-137; 106-030; 801-136		S
5	*106-020	1	Admin. Services Internship II	Prereq: Instr. Consent; 106-137; 024		S
5	*106-023	3	Office Management			S
5	*106-027	3	Integrated Business Projects	Prereq: 106-025; 804-134 OR 804-135		S
5	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 60

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Administrative Professional (10-106-6)

The *Administrative Professional* program prepares individuals to perform administrative and office support activities. Students will develop skills in word processing, spreadsheets, presentation software, filing/records management, and production of business documents. Extensive software skills are acquired, as well as Internet research abilities and oral and written communication skills. Professional development training includes ethics, group interaction, problem-solving, self-awareness, and professionalism.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate effective workplace communications.
2. Apply technology skills to business and administrative tasks.
3. Perform routine administrative procedures.
4. Manage administrative tasks.
5. Maintain internal and external relationships.
6. Model professionalism in the workplace.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 60 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Accreditation Statement

Gateway Technical College's Administrative Professional program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs.

Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213
Phone: (913) 339-9356
www.acbsp.org

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Administrative Professional (10-106-6)

Associate of Applied Science

Effective 2026/2027

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O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*106-137	3	Keyboarding Applications		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*106-024	3	Professionalism in Business		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*106-026	3	Business Publications	Prereq: 106-137		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	801-196	3	Oral/Interpersonal Communication			SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*106-021	3	Business Office Fundamentals			F
4	*106-028	3	Office Technologies Essentials			F
4	*106-030	3	Word Processing for Business	Prereq: 106-137		F

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Administrative Professional (10-106-6) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
5	*106-006	3	Business Communication Skills	Prereq: 106-137; 106-030; 801-136		S
5	*106-019	1	Admin. Services Internship I	Prereq: Instructor Consent & 106-137; Coreq: 106-024; 801-136; 804-134 OR 804-135		S
5	*106-025	3	Spreadsheets for Business	Prereq: 106-137		S
6	101-112 **OR** 101-114	3 4	Accounting for Business **OR** Accounting Principles			SU
6	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
7	*106-022	3	Info Management for Business	Prereq: 106-137		F
7	*106-029	3	Presentations for Business	Prereq: 106-137		F
7	*106-190	3	Administrative Office Procedures	Prereq: 106-025		F
8	*106-020	1	Admin. Services Internship II	Prereq: Instructor Consent; 106-137; 106-024		S
8	*106-023	3	Office Management			S
8	*106-027	3	Integrated Business Projects	Prereq: 106-025; 804-134 OR 804-135		S

Minimum Program Total Credits Required: 60

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Administrative Professional (10-106-6)

The *Administrative Professional* program prepares individuals to perform administrative and office support activities. Students will develop skills in word processing, spreadsheets, presentation software, filing/records management, and production of business documents. Extensive software skills are acquired, as well as Internet research abilities and oral and written communication skills. Professional development training includes ethics, group interaction, problem-solving, self-awareness, and professionalism.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate effective workplace communications.
2. Apply technology skills to business and administrative tasks.
3. Perform routine administrative procedures.
4. Manage administrative tasks.
5. Maintain internal and external relationships.
6. Model professionalism in the workplace.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 60 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Accreditation Statement

Gateway Technical College's Administrative Professional program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs.

Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213
Phone: (913) 339-9356
www.acbsp.org

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Advanced Manufacturing Technology (10-664-2)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/advanced-manufacturing. Please see your academic advisor for additional information.

I-D = iMET Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F[+]
1	*628-109	3	Mechanical Skills for Technicians			F
1	*612-102	3	Intro to Pneumatics & Hydraulics			F
1	*664-100	2	Intro to Industrial Control Systems			F
1	*664-105	2	Intro to Industrial Robots		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*664-110	2	Intro to Mechatronics		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*664-116	2	Intro to Mfg Quality Control Systems			F
2	*620-108	3	Fundamentals of Industrial Controls	Prereq: 664-100		S
2	*664-103	3	Motor Controls for Manufacturing			S
2	*664-104	2	Industrial Control System Applications	Coreq: 664-103; 664-118		S
2	*664-112	3	Fundamentals of Machining Processes			S
2	*664-118	3	PLC & HMI Programming			S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S[+]

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Advanced Manufacturing Technology (10-664-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D
3	*664-120	2	Intro to Industrial Internet of Things (IIot)			SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
3	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
4	*606-128	2	CAD – Solidworks			F
4	*664-119	3	Advanced Manufacturing Network Systems			F
4	*664-121	2	Vision and Smart Sensors	Prereq: 664-118 OR 605-136; 664-103 OR 664-102		F
4	*664-123	2	Advanced Industrial Robotics	Prereq: 664-105; 664-118		F
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+
5	*664-113	3	Leadership for Advanced Manufacturing			S
5	*664-115	2	Interpreting Engineering Drawings	Prereq: 804-134 OR 804-135; 801-136		S
5	*664-117	2	Materials and Processes			S
5	*664-124	3	Integrated Systems Capstone	Prereq: Instructor Consent: 664-118; 664-123		S
5	801-198	3	Speech			S+

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Advanced Manufacturing Technology (10-664-2)

Advanced Manufacturing Technology combines mechanical, electronic, and information technology into a single discipline that crosses the traditional boundaries of a skilled technician. Advanced Manufacturing technicians need a broad understanding of mechanical and electrical principles, and the use of data to optimize the manufacturing process through intelligent automation. These industry certifications are embedded in the program: Snap on Hand tool Safety, Snap on Multimeter, OSHA 10, and Starrett Precision Measurement.

Program Learning Outcomes

Graduates will be able to:

1. Apply state and national safety rules to the manufacturing systems environment.
2. Analyze automation within a complex manufacturing system.
3. Manage advanced manufacturing systems for operational efficiency and cost control.
4. Analyze technical specifications for implementation of manufacturing systems, modules, and components.
5. Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.
6. Integrate industrial control systems into manufacturing processes.
7. Apply electronic principles to devices within a complex manufacturing systems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription safety glasses are necessary, please allow a minimum of 90 days before the program start to obtain prescription and glasses.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Advanced Manufacturing Technology (10-664-2)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/advanced-manufacturing. Please see your academic advisor for additional information.

I-D = iMET Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*628-109	3	Mechanical Skills for Technicians			F
1	*664-110	2	Intro to Mechatronics		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*664-100	2	Intro to Industrial Control Systems			F
2	*620-108	3	Fundamentals of Industrial Controls	Prereq: 664-100		S
2	*664-112	3	Fundamentals of Machining Processes			S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	*664-120	2	Intro to Industrial Internet of Things (IIot)			SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
3	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
4	*612-102	3	Intro to Pneumatics & Hydraulics			F
4	*664-105	2	Intro to Industrial Robots		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
4	*664-116	2	Intro to Mfg Quality Control Systems			F

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Advanced Manufacturing Technology (10-664-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	I-D
5	*664-103	3	Motor Controls for Manufacturing			S
5	*664-104	2	Industrial Control System Applications	Coreq: 664-103; 664-118		S
5	*664-118	3	PLC & HMI Programming			S
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
6	801-198	3	Speech			SU+
7	*606-128	2	CAD – Solidworks			F
7	*664-119	3	Advanced Manufacturing Network Systems			F
7	*664-121	2	Vision and Smart Sensors	Prereq: 664-118 OR 605-136; 664-103 OR 664-102		F
7	*664-123	2	Advanced Industrial Robotics	Prereq: 664-105; 664-118		F
8	*664-113	3	Leadership for Advanced Manufacturing			S
8	*664-115	2	Interpreting Engineering Drawings	Prereq: 804-134 OR 804-135; 801-136		S
8	*664-117	2	Materials and Processes			S
8	*664-124	3	Integrated Systems Capstone	Prereq: Instructor Consent: 664-118; 664-123		S

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Advanced Manufacturing Technology (10-664-2)

Advanced Manufacturing Technology combines mechanical, electronic, and information technology into a single discipline that crosses the traditional boundaries of a skilled technician. Advanced Manufacturing technicians need a broad understanding of mechanical and electrical principles, and the use of data to optimize the manufacturing process through intelligent automation. These industry certifications are embedded in the program: Snap on Hand tool Safety, Snap on Multimeter, OSHA 10, and Starrett Precision Measurement.

Program Learning Outcomes

Graduates will be able to:

1. Apply state and national safety rules to the manufacturing systems environment.
2. Analyze automation within a complex manufacturing system.
3. Manage advanced manufacturing systems for operational efficiency and cost control.
4. Analyze technical specifications for implementation of manufacturing systems, modules, and components.
5. Explore a Proportional Integral Derivative (PID) control system to achieve a desired outcome in a manufacturing outcome.
6. Integrate industrial control systems into manufacturing processes.
7. Apply electronic principles to devices within a complex manufacturing systems.

Essential Career Competencies

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2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription safety glasses are necessary, please allow a minimum of 90 days before the program start to obtain prescription and glasses.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Business and Transportation

Aeronautics – Pilot Training (10-402-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/aeronautics. Please see your academic advisor for additional information.

HZ-D = Horizon Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	HZ-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*402-129	3	Aviation / Introduction		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*402-136	3	Aero Science – Aviation Weather			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+
1	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+
2	*402-139	3	Aero Science – Engine/ Structure/ System			S
2	*402-178	2	Private Pilot I	Prereq: Program Admission; 402-129; 402-136; Inst. Consent; Coreq: 402-181	• Please see notes on last page	S
2	*402-181	1	Private Pilot Ground Theory/App I	Prereq: Program Admission; 402-129; 402-136; Inst. Consent; Coreq: 402-178		S
2	801-198	3	Speech			S+
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	*402-179	1	Private Pilot II	Prereq: Program Admission; 402-178; Inst. Consent; Coreq: 402-182	• Please see notes on last page	SU
3	*402-180	1	Private Pilot III	Prereq: Program Admission; 402-179; Inst. Consent; Coreq: 402-182	• Please see notes on last page	SU
3	*402-182	1	Private Pilot Ground Theory/App II	Prereq: Program Admission; 402-178; 402-181; Inst. Consent		SU
3	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Aeronautics – Pilot Training (10-402-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	HZ-D
4	*402-135	3	Aero Science – Aerophysics/ Aerodynamics	Prereq: 804-134 OR 804-135; 801-136		F
4	*402-137	3	Aero Science – Instrument	Prereq: Program Admission; 402-129		F
4	*402-184	1	Commercial I Mulitengine-Intro	Prereq: Program Admission; 402-180; Inst. Consent	• Please see notes on last page	F
4	*402-185	1	Commercial II Instr. Procedures I	Prereq: Program Admission; Inst. Consent; Coreq: 402-137; 402-184	• Please see notes on last page	F
4	*402-186	1	Commercial III Instr. Procedures II	Prereq: Program Admission; 402-185; Inst. Consent; Coreq: 402-137	• Please see notes on last page	F
4	*402-196	1	Flight Proficiency I	Prereq: Program Admission; 402-184; Inst. Consent; Coreq: 402-185	• Please see notes on last page	F
4	*402-197	2	Flight Proficiency II	Prereq: Program Admission; 402-180; Inst. Consent	• Please see notes on last page	F
5	*402-123	2	Aircraft Systems – Advanced	Prereq: Program Admission; 402-139		S
5	*402-133	3	Aero Science – Commercial	Prereq: Program Admission; 402-129		S
5	*402-138	3	Aero Science – Aviation Safety	Prereq: Program Admission; 402-137; 402-180		S
5	*402-188	1	Instrument Procedures I	Prereq: Program Admission; 402-137; 186; Inst. Consent; Coreq: 402-190	• Please see notes on last page	S
5	*402-189	1	Instrument Procedures II	Prereq: Program Admission; 402-188; Inst. Consent Coreq: 402-190	• Please see notes on last page	S
5	402-190	2	Instrument Theory and Application	Prereq: Program Admission; 402-186; Inst. Consent		S
6	*402-120	2	Aero Decision Making	Prereq: Program Admission; 402-173; Inst. Consent; Coreq: 402-138		SU
6	*402-192	2	Commercial IV Cross Country	Prereq: Program Admission; 402-189; Inst. Consent Coreq: 402-193	• Please see notes on last page	SU
6	*402-193	1	Commercial V Basic Comm. Manuevers	Prereq: Program Admission; Inst. Consent; Coreq: 402-192	• Please see notes on last page	SU
6	*402-194	1	Commercial VI Advanced Comm. Manuevers	Prereq: Program Admission; 402-193; Inst. Consent	• Please see notes on last page	SU

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Aeronautics – Pilot Training (10-402-1)

Aeronautics-Pilot Training develops the skills and knowledge, through academic and practical application, necessary for an entry-level career as a professional pilot. Required aircraft training and electives include commercial certificate with single engine, multi-engine, and instrument ratings. Actual certification is dependent upon successful completion of an external assessment by the individual student.

Program Learning Outcomes

Graduates will be able to:

1. Maintain compliance with procedures and practices contained in the Federal Aviation Regulations (FAR's), Aeronautical Information Manual (AIM), and other applicable FAA publications.
2. Obtain the Federal Aviation Administration (FAA) certification as a Commercial Pilot for single and multi-engine land planes with an instrument rating.
3. Demonstrate Single-pilot Resource Management (SRM).
4. Act as a professional member of the aviation community.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. This is a high-demand program that utilizes a priority placement process each semester for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students must maintain a 2.0 GPA in Aviation Core courses (402 courses) to continue with flight training.
2. A student supplied tablet computer is required for all flight courses. Please contact the department prior to purchasing a tablet for the minimum specification sheet.
3. A valid FAA 2nd class (or higher) medical certificate is required prior to beginning 402-178. All other flight courses require only a 3rd class medical certificate.
4. Proof of U.S. Citizenship or TSA approval required prior to beginning any flight course.
5. This is a high-demand program that utilizes a priority placement process each semester for enrollment in core program courses.
6. In order to meet the FAA requirements for proficiency, and to successfully complete the course under FAA Part 141, students may need to enroll in a non-degree course to purchase additional flight time.
7. All flight courses are offered every semester.
8. Fees for external assessments are not included in the course fees and are the responsibility of the student.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Business and Transportation

Aeronautics – Pilot Training (10-402-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/aeronautics. Please see your academic advisor for additional information.

HZ-D = Horizon Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	HZ-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*402-129	3	Aviation / Introduction		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*402-136	3	Aero Science – Aviation Weather			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+
2	*402-139	3	Aero Science – Engine/ Structure/ System			S
2	*402-178	2	Private Pilot I	Prereq: Program Admission; 402-129; 402-136; Inst.Consent; Coreq: 402-181	• Please see notes on last page	S
2	*402-181	1	Private Pilot Ground Theory/App I	Prereq: Program Admission; 402-129; 402-136; Inst.Consent; Coreq: 402-178	• Please see notes on last page	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	*402-179	1	Private Pilot II	Prereq: Program Admission; 402-178; Inst.Consent; Coreq: 402-182	• Please see notes on last page	SU
3	*402-180	1	Private Pilot III	Prereq: Program Admission; 402-179; Inst.Consent; Coreq: 402-182	• Please see notes on last page	SU
3	*402-182	1	Private Pilot Ground Theory/App II	Prereq: Program Admission; 402-178; 402-181; Inst. Consent		SU
3	801-198	3	Speech			SU+
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Aeronautics – Pilot Training (10-402-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	HZ-D
4	*402-137	3	Aero Science – Instrument	Prereq: Program Admission; 402-129		F
4	*402-184	1	Commercial I Mulitengine-Intro	Prereq: Program Admission; 402-180; Inst. Consent	• Please see notes on last page	F
4	*402-185	1	Commercial II Instr. Procedures I	Prereq: Program Admission; Inst. Consent; Coreq: 402-137; 402-184	• Please see notes on last page	F
4	*402-186	1	Commercial III Instr. Procedures II	Prereq: Program Admission; 402-185; Inst. Consent; Coreq: 402-137	• Please see notes on last page	F
4	*402-196	1	Flight Proficiency I	Prereq: Program Admission; 402-184; Inst. Consent; Coreq: 402-185	• Please see notes on last page	F
4	*402-197	2	Flight Proficiency II	Prereq: Program Admission; 402-180; Inst. Consent	• Please see notes on last page	F
5	*402-133	3	Aero Science – Commercial	Prereq: Program Admission; 402-129		S
5	*402-135	3	Aero Science – Aerophysics/Aerodynamics	Prereq: Program Admission; 804-134 OR 804-135; 801-136		S
5	*402-188	1	Instrument Procedures I	Prereq: Program Admission; 402-137; 186; Inst. Consent; Coreq: 402-190	• Please see notes on last page	S
5	*402-189	1	Instrument Procedures II	Prereq: Program Admission; 402-188; Inst. Consent; Coreq: 402-190	• Please see notes on last page	S
5	*402-190	2	Instrument Theory and Application	Prereq: Program Admission; 402-186; Inst. Consent		S+
6	*402-138	3	Aero Science – Aviation Safety	Prereq: Program Admission; 402-137; 402-180		SU
6	*402-192	2	Commercial IV Cross Country	Prereq: Program Admission; 402-189; Inst. Consent; Coreq: 402-193	• Please see notes on last page	SU
6	809-196	3	Sociology, Introduction to	Prereq: Program Admission; 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
7	*402-120	2	Aero Decision Making	Prereq: Program Admission; 402-173; Inst. Consent; Coreq: 402-138		F
7	*402-123	2	Aircraft Systems – Advanced	Prereq: Program Admission; 402-139		F
7	*402-193	1	Commercial V Basic Comm. Manuevers	Prereq: Program Admission; Inst. Consent; Coreq; 402-192	• Please see notes on last page	F
7	*402-194	1	Commercial VI Advanced Comm. Manuevers	Prereq: Program Admission; 402-193; Inst. Consent	• Please see notes on last page	F

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Aeronautics – Pilot Training (10-402-1)

Aeronautics-Pilot Training develops the skills and knowledge, through academic and practical application, necessary for an entry-level career as a professional pilot. Required aircraft training and electives include commercial certificate with single engine, multi-engine, and instrument ratings. Actual certification is dependent upon successful completion of an external assessment by the individual student.

Program Learning Outcomes

Graduates will be able to:

1. Maintain compliance with procedures and practices contained in the Federal Aviation Regulations (FAR's), Aeronautical Information Manual (AIM), and other applicable FAA publications.
2. Obtain the Federal Aviation Administration (FAA) certification as a Commercial Pilot for single and multi-engine land planes with an instrument rating.
3. Demonstrate Single-pilot Resource Management (SRM).
4. Act as a professional member of the aviation community.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. This is a high-demand program that utilizes a priority placement process each semester for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students must maintain a 2.0 GPA in Aviation Core courses (402 courses) to continue with flight training.
2. A student supplied tablet computer is required for all flight courses. Please contact the department prior to purchasing a tablet for the minimum specification sheet.
3. A valid FAA 2nd class (or higher) medical certificate is required prior to beginning 402-178. All other flight courses require only a 3rd class medical certificate.
4. Proof of U.S. Citizenship or TSA approval required prior to beginning any flight course.
5. This is a high-demand program that utilizes a priority placement process each semester for enrollment in core program courses.
6. In order to meet the FAA requirements for proficiency, and to successfully complete the course under FAA Part 141, students may need to enroll in a non-degree course to purchase additional flight time.
7. All flight courses are offered every semester.
8. Fees for external assessments are not included in the course fees and are the responsibility of the student.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Architectural – Structural Engineering Technician (10-614-6)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/architectural-structural. Please see your academic advisor for additional information.

I-E = iMET Center/evenings, E-E = Elkhorn/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-E	E-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+	F
1	*607-104	3	Building Material & Construction Method		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*607-136	2	Construction Project Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*607-141	2	Construction Basics			F	F
1	*607-170	2	AutoCAD for Construction Sciences			F+	F
1	804-134 **OR** 804-115	3 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
2	*607-102	2	Conflict Resolution in CET			S	S
2	*607-128	3	Construction Estimating	Coreq: 804-115 OR 804-134 OR 804-135; 801-136		S	S
2	*607-129	2	Future Trends Civil/Archi Tech	Prereq: 607-104; 607-141 OR 607-103		S	S
2	*607-132	3	Structural Mechanics	Prereq: 804-115 OR 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	*614-102	2	Construction Project Management 2	Prereq: 607-136		S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Architectural – Structural Engineering Technician (10-614-6) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-E	E-E
3	*607-148	1	Wood-Design & Detailing	Prereq: 607-132		SU	SU
3	*607-169	2	Surveying Basics			SU	SU
3	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+	SU
3	*614-150	2	3D CAD: Building Information Modeling			SU	SU
3	*607-187	2	3D CAD: Dig Terrain Model			SU	SU
4	*607-134	2	Steel – Design and Detailing	Prereq: 607-132		F	F
4	*614-108	1	Residential Code			F	F
4	*614-110	3	Architectural Drafting – Residential	Prereq: 614-150; Coreq: 614-108		F	F
4	*614-140	3	Mechanical Systems for Buildings	Prereq: 607-104		F	F
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+	F
4	801-197	3	Technical Reporting	Prereq: 801-136		F+	F
5	*607-135	2	Reinforced Concrete-Design & Detailing	Prereq: 607-132		S	S
5	*614-107	3	Residential and Commercial Inspection	Prereq: 607-104; 614-108 ; Coreq: 614-114		S	S
5	*614-114	2	Commercial Code			S	S
5	*614-115	3	Architectural Drafting – Commercial	Prereq: 614-150; Coreq: 614-114		S	S
5	*614-123	1	Capstone: Architectural Structural Tech	Prereq: 607-134 OR 614-100; Coreq: 614-115; 607-135 OR 614-101		S	S
5	*614-138	1	3D Modeling and Virtualization	Prereq: 614-150; 607-187		S	S

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Architectural – Structural Engineering Technician (10-614-6)

Architectural-Structural Engineering Technician focuses on a wide variety of aspects within the profession of Engineering – beginning with surveying, transitioning into design, and resulting in construction. The first year classes are mostly the same for programs in the Construction Sciences Group (see notes). Basic skills are developed and students are exposed to all areas of the various professions. This allows the student to be able to understand and communicate across the professions, plus it allows the student to discover what area they really enjoy working in. The second year focuses on aspects specific to buildings, both design and structural components. The program is designed as a fusion of education and application; hence all the core classes are tied to real world experiences with a significant influx of participation from potential future employers. Some students use this program as a place to prepare themselves to transfer to a four-year university. Most, however, use this program as a means to develop the skills that allow them to obtain a productive career in various aspects of architecture.

Program Learning Outcomes

Graduates will be able to:

1. Develop Construction Documents
2. Evaluate Building Materials
3. Develop building designs
4. Integrate building systems

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a very intense and challenging program. Poor existing skills, especially poor math skills, can always be improved. As long as you have the heart and desire to succeed, the instructors will work with you.
2. Classes offered at Elkhorn Campus via NODAL delivery. Please see an advisor for details.
3. The programs in the Construction Science Group include: Civil Engineering Tech: Highway Technology, Architectural-Structural Engineering Technician, Construction Management Technician, and Material Testing Inspector Certificate.
4. Students wishing to pursue Calculus courses at Gateway should take 804-115 College Technical Math 1. Please see an advisor for details.
5. Safety glasses may be required in various classes after the first semester. If prescription safety glasses are required, please allow sufficient time to obtain your glasses prior to the start of the 2nd semester.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Architectural – Structural Engineering Technician (10-614-6)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/architectural-structural. Please see your academic advisor for additional information.

I-E = iMET Center/evenings, E-E = Elkhorn/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-E	E-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+	F
1	*607-141	2	Construction Basics			F	F
1	*607-104	3	Building Material & Construction Method		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	804-134 **OR** 804-115	3 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+	F
2	*607-102	2	Conflict Resolution in CET			S	S
2	*607-129	2	Future Trends Civil/Archi Tech	Prereq: 607-104; 607-141 OR 607-103		S	S
2	*607-132	3	Structural Mechanics	Prereq: 804-115 OR 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S
3	*607-169	2	Surveying Basics			SU	SU
3	*614-150	2	3D CAD: Building Information Modeling		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU	SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+	SU

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

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Architectural – Structural Engineering Technician (10-614-6) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-E	E-E
4	*607-136	2	Construction Project Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
4	*614-108	1	Residential Code			F	F
4	*614-110	3	Architectural Drafting – Residential	Prereq: 614-150; Coreq: 614-108		F	F
4	*614-140	3	Mechanical Systems for Buildings	Prereq: 607-104		F	F
5	*614-102	2	Construction Project Management 2	Prereq: 607-136		S	S
5	*607-128	3	Construction Estimating	Coreq: 804-115 OR 804-134 OR 804-135; 801-136		S	S
5	*614-114	2	Commercial Code			S	S
5	*614-115	3	Architectural Drafting – Commercial	Prereq: 614-150; Coreq: 614-114		S	S
6	*607-148	1	Wood-Design & Detailing	Prereq: 607-132		SU	SU
6	*607-187	2	3D CAD: Dig Terrain Model			SU	SU
6	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+	SU
7	*607-134	2	Steel – Design and Detailing	Prereq: 607-132		F	F
7	801-197	3	Technical Reporting	Prereq: 801-136		F+	F
7	*607-170	2	AutoCAD for Construction Sciences			F	F
8	*607-135	2	Reinforced Concrete-Design & Detailing	Prereq: 607-132		S	S
8	*614-107	3	Residential and Commercial Inspection	Prereq: 607-104; 614-108 ; Coreq: 614-114		S	S
8	*614-123	1	Capstone: Architectural Structural Tech	Prereq: 607-134 OR 614-100; Coreq: 614-115; 607-135 OR 614-101		S	S
8	*614-138	1	3D Modeling and Virtualization	Prereq: 614-150; 607-187		S	S

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Architectural – Structural Engineering Technician (10-614-6)

Architectural-Structural Engineering Technician focuses on a wide variety of aspects within the profession of Engineering – beginning with surveying, transitioning into design, and resulting in construction. The first year classes are mostly the same for programs in the Construction Sciences Group (see notes). Basic skills are developed and students are exposed to all areas of the various professions. This allows the student to be able to understand and communicate across the professions, plus it allows the student to discover what area they really enjoy working in. The second year focuses on aspects specific to buildings, both design and structural components. The program is designed as a fusion of education and application; hence all the core classes are tied to real world experiences with a significant influx of participation from potential future employers. Some students use this program as a place to prepare themselves to transfer to a four-year university. Most, however, use this program as a means to develop the skills that allow them to obtain a productive career in various aspects of architecture.

Program Learning Outcomes

Graduates will be able to:

1. Develop Construction Documents
2. Evaluate Building Materials
3. Develop building designs
4. Integrate building systems

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
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3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a very intense and challenging program. Poor existing skills, especially poor math skills, can always be improved. As long as you have the heart and desire to succeed, the instructors will work with you.
2. Classes offered at Elkhorn Campus via NODAL delivery. Please see an advisor for details.
3. The programs in the Construction Science Group include: Civil Engineering Tech: Highway Technology, Architectural-Structural Engineering Technician, Construction Management Technician, and Material Testing Inspector Certificate.
4. Students wishing to pursue Calculus courses at Gateway should take 804-115 College Technical Math 1. Please see an advisor for details.
5. Safety glasses may be required in various classes after the first semester. If prescription safety glasses are required, please allow sufficient time to obtain your glasses prior to the start of the 2nd semester.

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Automotive Technology (10-602-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/automotive-technology. Please see your academic advisor for additional information.

HZ-D = Horizon Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*602-130	3	Auto Shop Essentials		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*602-107	2	Auto Service Fundamentals	Prereq: 602-130		F
1	*602-104	3	Brake Systems	Prereq: 602-107; 602-130		F
1	*602-124	3	Steering & Suspension Systems	Prereq: 602-107; 602-130		F
2	*602-125	2	Electrical & Electronic Systems 1	Prereq: 602-107; 602-130 Coreq: 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*602-127	3	Electrical & Electronic Systems 2	Prereq: 602-125		S
2	*602-196	3	Climate Control Systems	Prereq: 602-127		S
2	*602-204	3	Engine Repair 1	Prereq: 602-107; 602-130		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
3	801-196	3	Oral/Interpersonal Communication			SU+
3	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.
(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Automotive Technology (10-602-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-D
4	*602-197	3	Engine Performance 1	Prereq: 602-127; 602-204; 804-134 OR 804-135 Coreq: 801-136		F
4	*602-129	3	Auto Scope and Scanner Diagnosis	Prereq: 602-197; 801-136		F
4	*602-128	3	Electrical & Electronic Systems 3	Prereq: 602-127		F
4	*602-149	4	Manual Drive Train & Axles	Prereq: 602-107; 602-130		F
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F**+**
5	*602-195	2	Advanced Chassis Systems	Prereq: 602-104; 602-124; 602-127		S
5	*602-205	2	Engine Repair 2	Prereq: 602-204		S
5	*602-109	4	Auto Transmission/Transaxle	Prereq: 602-127		S
5	*602-198	4	Engine Performance 2	Prereq: 602-197		S
5	*602-120 **OR** *602-131	2	Auto Service Simulation **OR** Automotive Service Internship	Prereq: 602-104; 602-124; 602-128; 602-129; 602-196; 602-198; 602-205 Prereq: Instructor Consent		S

Minimum Program Total Credits Required:65

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Automotive Technology (10-602-3)

Automotive Technology is a two-year repair and maintenance curriculum, totaling over 1,800 hours of automotive instruction. Students desiring to become entry-level line technicians at automotive dealerships or independent repair facilities will be prepared for ASE Master Certification in all areas of automotive mechanical repairs. Students will become competent in engine performance, engine repair, manual and automatic drive lines, transmissions and transaxles, electrical systems, and electronics, using a simulated work environment on vehicles.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate professionalism appropriate to the auto service industry.
2. Perform diagnosis, service and repair of automotive internal combustion engines.
3. Perform diagnosis, service and repair of automotive automatic transmission / transaxle systems.
4. Perform diagnosis, service and repair of automotive manual drive train and axles systems.
5. Perform diagnosis, service and repair of automotive steering and suspension steering systems.
6. Perform diagnosis, service and repair of automotive brake systems.
7. Perform diagnosis, service and repair of auto electrical/electronic systems.
8. Perform diagnosis, service and repair of automotive heating and air conditioning systems.
9. Perform diagnosis, service and repair of automotive engine performance systems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. A student supplied tablet computer is required for all 602 courses. Please contact the department prior to purchasing a computer for the minimum specification sheet.
2. Safety glasses are required in labs. If prescription safety glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Automotive Technology (10-602-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/automotive-technology. Please see your academic advisor for additional information.

HZ-E = Horizon Center/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*602-130	3	Auto Shop Essentials		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*602-107	2	Auto Service Fundamentals	Prereq: 602-130		F
1	*602-104	3	Brake Systems	Prereq: 602-107; 602-130		F
1	*602-124	3	Steering & Suspension Systems	Prereq: 602-107; 602-130		F
2	*602-125	2	Electrical & Electronic Systems 1	Prereq: 602-107; 602-130 Coreq: 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*602-127	3	Electrical & Electronic Systems 2	Prereq: 602-125		S
2	*602-196	3	Climate Control Systems	Prereq: 602-127		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	*602-204	3	Engine Repair 1	Prereq: 602-107; 602-130		SU
3	*602-197	3	Engine Performance 1	Prereq: 602-127; 602-204; 804-134 OR 804-135 Coreq: 801-136		SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.
(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Automotive Technology (10-602-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-E
4	*602-129	3	Auto Scope and Scanner Diagnosis	Prereq: 602-197; 801-136		F
4	*602-128	3	Electrical & Electronic Systems 3	Prereq: 602-127		F
4	*602-149	4	Manual Drive Train & Axles[4]	Prereq: 602-107; 602-130		F
5	*602-195	2	Advanced Chassis Systems	Prereq: 602-104; 602-124; 602-127		S
5	*602-205	2	Engine Repair 2	Prereq: 602-204		S
5	*602-109	4	Auto Transmission/ Transaxle	Prereq: 602-127		S
5	801-196	3	Oral/Interpersonal Communication			S+
6	*602-198	4	Engine Performance 2	Prereq: 602-197		SU
6	*602-120 **OR** *602-131	2	Auto Service Simulation **OR** Automotive Service Internship	Prereq: 602-104; 602-124; 602-128; 602-129; 602-196; 602-198; 602-205 Prereq: Instructor Consent		SU
6	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+

Minimum Program Total Credits Required:65

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Automotive Technology (10-602-3)

Automotive Technology is a two-year repair and maintenance curriculum, totaling over 1,800 hours of automotive instruction. Students desiring to become entry-level line technicians at automotive dealerships or independent repair facilities will be prepared for ASE Master Certification in all areas of automotive mechanical repairs. Students will become competent in engine performance, engine repair, manual and automatic drive lines, transmissions and transaxles, electrical systems, and electronics, using a simulated work environment on vehicles.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate professionalism appropriate to the auto service industry.
2. Perform diagnosis, service and repair of automotive internal combustion engines.
3. Perform diagnosis, service and repair of automotive automatic transmission / transaxle systems.
4. Perform diagnosis, service and repair of automotive manual drive train and axles systems.
5. Perform diagnosis, service and repair of automotive steering and suspension steering systems.
6. Perform diagnosis, service and repair of automotive brake systems.
7. Perform diagnosis, service and repair of auto electrical/electronic systems.
8. Perform diagnosis, service and repair of automotive heating and air conditioning systems.
9. Perform diagnosis, service and repair of automotive engine performance systems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. A student supplied tablet computer is required for all 602 courses. Please contact the department prior to purchasing a computer for the minimum specification sheet.
2. Safety glasses are required in labs. If prescription safety glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Business Management (10-102-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/business-management. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*101-114	4	Accounting Principles			F/S/SU
1	*102-137	3	Intro to Business		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	*102-160	3	Business Law			F/S/SU
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*104-101	3	Marketing Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
2	*104-104	3	Selling Principles			F/S/SU
2	*105-106	3	Business Communications	Prereq: 801-136		F/S/SU
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	801-198	3	Speech			F/S/SU
3	*103-143	3	Computers for Professionals			F/S/SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Business Management (10-102-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*104-105	3	Promotion Principles			F/S/SU
4	*102-121	3	Credit Management	Prereq: 804-134 OR 804-135; 801-136		F/S/SU
4	809-166	3	Ethics: Theory & Applications, Intro to	Prereq: 838-105 OR 851-757		F/S/SU
4	*196-191	3	Supervision			F/S/SU
4	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
5	*102-186	3	Business Management Internship	Prereq: Instructor Consent		F/S/SU
5	*102-196	4	Business Decision Management	Prereq: 101-114; 104-101 OR 101-112; 103-103; 104-101		F/S/SU
5	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F/S/SU
6	809-143	3	Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU

Minimum Program Total Credits Required: 63

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Business Management (10-102-3)

Business Management is designed to provide a broad background in management theory, human resource management and behavior, accounting, marketing, and business decision making. Students learn how to effectively plan, organize, direct, and evaluate business functions essential to efficient and productive business organizations. Graduates will have the business knowledge and skills to prepare them for a management trainee, assistant, manager, or team leader position in a wide cross-section of business, government, and not-for-profit sectors of our economy.

Program Learning Outcomes

Graduates will be able to:

1. Plan the operations of a business.
2. Organize resources to achieve the goals of the organization.
3. Direct individuals and/or processes to meet organizational goals.
4. Control business processes.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 63 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

104-194 International Marketing	196-193 Human Resources Management
806-112 Principles of Sustainability	809-201 Macroeconomics

Accreditation Statement

Gateway Technical College's Business Management program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs [www.acbsp.org].

Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213
Phone: (913) 339-9356
www.acbsp.org

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Business Management (10-102-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/business-management. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*102-137	3	Intro to Business		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	*104-101	3	Marketing Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*104-104	3	Selling Principles			F/S/SU
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	809-143	3	Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	801-198	3	Speech			F/S/SU
4	*101-114	4	Accounting Principles			F/S/SU
4	*103-143	3	Computers for Professionals			F/S/SU
4	*105-106	3	Business Communications	Prereq: 801-136		

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Business Management (10-102-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
5	*102-160	3	Business Law			F/S/SU
5	*104-105	3	Promotion Principles			F/S/SU
5	*102-121	3	Credit Management	Prereq: 804-134 OR 804-135; 801-136		F/S/SU
6	*102-186	3	Business Management Internship	Prereq: Instructor Consent		F/S/SU
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
7	*809-166	3	Ethics Theory & Applications, Intro	Prereq: 838-105 OR 851-757		F/S/SU
7	*196-191	3	Supervision			F/S/SU
8	*102-196	4	Business Decision Management	Prereq: 101-114; 104-101 OR 101-112; 103-103; 104-101		F/S/SU
8	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F/S/SU

Minimum Program Total Credits Required: 63

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Business Management (10-102-3)

Business Management is designed to provide a broad background in management theory, human resource management and behavior, accounting, marketing, and business decision making. Students learn how to effectively plan, organize, direct, and evaluate business functions essential to efficient and productive business organizations. Graduates will have the business knowledge and skills to prepare them for a management trainee, assistant, manager, or team leader position in a wide cross-section of business, government, and not-for-profit sectors of our economy.

Program Learning Outcomes

Graduates will be able to:

1 Plan the operations of a business.
2 Organize resources to achieve the goals of the organization.
3 Direct individuals and/or processes to meet organizational goals.
4 Control business processes.

Essential Career Competencies

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1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1 Minimum 63 credits with a cumulative GPA of 2.0 or above.
2 *Average of 2.0 ("C") or above for these major courses.
3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

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Accreditation Statement

Gateway Technical College's Business Management program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs [www.acbsp.org].

Accreditation Council for Business Schools and Programs (ACBSP)
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Phone: (913) 339-9356
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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Civil Engineering Technology-Highway Technology (10-607-4)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at ***https://www.gtc.edu/civil-engineering-technology-highway-technology****. Please see your academic advisor for additional information.*

I-E = iMET Center/evenings, E-E = Elkhorn/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-E	E-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+	F
1	*607-104	3	Building Material & Construction Method		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*607-141	2	Construction Basics			F	F
1	*607-170	2	AutoCAD for Construction Science			F	F
1	*607-191	1	Hydrology and Erosion Control			F	F
1	804-134 **OR** 804-115	3 **OR** 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+	F
2	*607-102	2	Conflict Resolution in CET			S	S
2	*607-128	3	Construction Estimating	Coreq: 804-115 OR 804-134 OR 804-135; 801-136		S	S
2	*607-132	3	Structural Mechanics	Prereq: 804-115 OR 804-134 OR 804-135		S	S
2	*607-175	3	Material Testing	Prereq: 607-104; 607-141	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S
3	*607-176	1	Drone and Lidar Surveying			SU	SU
3	*607-169	2	Surveying Basics		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU	SU
3	*607-187	2	3D CAD: Digital Terrain Modeling			SU	SU
3	*614-150	2	3D CAD: Building Information Modeling			SU	SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	SU

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Civil Engineering Technology-Highway Technology (10-607-4)

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-E	E-E
4	*607-127	3	Civil Engineering and Survey Drafting	Prereq: 607-187		F	F
4	*607-136	2	Construction Project Management			F	F
4	*607-173	3	Surveying Fundamentals	Prereq: 607-169; 607-187; 804-115 OR 804-134 OR 804-135		F	F
4	*607-177	2	Concrete Repair	Prereq: 607-139 OR 607-175		F	F
4	*607-178	2	Boundary Location and Research	Prereq: 607-169		F	F
4	801-197	3	Technical Reporting	Prereq: 801-136		F+	F
5	*607-117	2	Geographical Information Systems I			S	S
5	*607-154	2	Sewer and Water Systems	Prereq: 607-104; 804-115 OR 804-134 OR 804-135; 607-191		S	S
5	*607-161	2	Legal Aspects of Land Surveying	Prereq: 607-169		S	S
5	*607-166	1	Capstone: CET-Highway Technology	Prereq: Instructor Consent; Coreq: 607-150 OR 607-179; 607-154		S	S
5	*607-179	3	Route/Highway Design and Surveying	Prereq: 607-173; 607-127		S	S
5	*614-138	1	3D Modeling and Virtualization	Prereq: 614-150; 607-187		S	S
5	809-195	3	Economics	Prereq: 838-105 OR 851-757		S+	S

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Civil Engineering Technology – Highway Technology (10-607-4)

Civil Engineering is the profession to solve physical problems related to our civilization in order to help make the lives of everyone better. The program is part of Gateway's Construction Sciences Group (CSG) of programs (see Note 4). This program focuses on a wide variety of aspects beginning with surveying, transitioning into design, and resulting in construction of public works projects. The program is designed as a fusion of education and hands-on application. Embedded in the program is the WTCS MATERIAL TESTING INSPECTOR CERTIFICATE. the educational requirements for becoming a LAND SURVEYOR, and CONSTRUCTION MANAGEMENT courses.

Program Learning Outcomes

Graduates will be able to:

1. Utilize graphic techniques to produce engineering drawings.
2. Conduct standardized field and laboratory testing on civil engineering materials.
3. Utilize modern surveying methods for land measurements and/or construction layout.
4. Estimate material quantities and costs for civil engineering projects.
5. Utilize geometric elements to develop corridors.
6. Design storm systems to meet given design requirements.
7. Determine forces and stresses in elementary structural systems.
8. Employ productivity software to solve technical problems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a very intense and challenging program. Poor existing skills, especially poor math skills, can always be improved. As long as you have the heart and desire to succeed, the instructors will work with you.
2. Classes offered at Elkhorn Campus via NODAL delivery. Please see an advisor for details.
3. The programs in the Construction Science Group include: Civil Engineering Tech: Highway Technology, Architectural-Structural Engineering Technician and Construction Management Technician.
4. Students wishing to transfer onto a four-year degree and want to pursue Calculus courses at Gateway should see an advisor for transfer details regarding math class options instead of taking 804-134.
5. Safety glasses may be required in various classes after the first semester. If prescription safety glasses are required, please allow sufficient time to obtain your glasses prior to the start of the 2nd semester.
6. Field trips to local area job sites may be required as part of the class requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Civil Engineering Technology-Highway Technology (10-607-4)

Associate of Applied Science

Effective 2026/2027

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I-E = iMET Center/evenings, E-E = Elkhorn/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-E	E-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+	F
1	*607-104	3	Building Material & Construction Method		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*607-141	2	Construction Basics			F	F
1	804-134 **OR** 804-115	3 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+	F
2	*607-102	2	Conflict Resolution in CET			S	S
2	*607-132	3	Structural Mechanics	Prereq: 804-115 OR 804-134 OR 804-135		S	S
2	*607-175	3	Material Testing	Prereq: 607-104; 607-141	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S
3	*607-169	2	Surveying Basics		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU	SU
3	*607-176	1	Drone and Lidar Surveying			SU	SU
3	*607-187	2	3D CAD: Digital Terrain Modeling			SU	SU
3	801-197	3	Technical Reporting	Prereq: 801-136		SU+	SU
4	*607-136	2	Construction Project Management			F	F
4	*607-173	3	Surveying Fundamentals	Prereq: 607-169; 607-187; 804-115 OR 804-134 OR 804-135		F	F
4	*607-177	2	Concrete Repair	Prereq: 607-139 OR 607-175		F	F
4	*607-178	2	Boundary Location and Research	Prereq: 607-169		F	F

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Civil Engineering Technology-Highway Technology (10-607-4)

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-E	E-E
5	*607-117	2	Geographical Information Systems I			S	S
5	*607-161	2	Legal Aspects of Land Surveying	Prereq: 607-169		S	S
5	*607-128	3	Construction Estimating	Coreq: 804-115 OR 804-134 OR 804-135; 801-136		S	S
6	*614-150	2	3D CAD: Building Information Modeling			SU	SU
6	809-195	3	Economics	Prereq: 838-105 OR 851-757		SU[+]	SU
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU[+]	SU
7	*607-127	3	Civil Engineering and Survey Drafting	Prereq: 607-187		F	F
7	*607-170	2	AutoCAD for Construction Science			F	F
7	*607-191	1	Hydrology and Erosion Control			F	F
8	*607-179	3	Route/Highway Design and Surveying	Prereq: 607-173; 607-127		S	S
8	*607-154	2	Sewer and Water Systems	Prereq: 607-104; 804-115 OR 804-134 OR 804-135; 607-191		S	S
8	*607-166	1	Capstone: CET-Highway Technology	Prereq: Instructor Consent; Coreq: 607-150 OR 607-179; 607-154		S	S
8	*614-138	1	3D Modeling and Virtualization	Prereq: 614-150; 607-187		S	S

Minimum Program Total Credits Required: 65

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Civil Engineering Technology – Highway Technology (10-607-4)

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8. Employ productivity software to solve technical problems.

Essential Career Competencies

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4. Teamwork and Collaboration
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6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a very intense and challenging program. Poor existing skills, especially poor math skills, can always be improved. As long as you have the heart and desire to succeed, the instructors will work with you.
2. Classes offered at Elkhorn Campus via NODAL delivery. Please see an advisor for details.
3. The programs in the Construction Science Group include: Civil Engineering Tech: Highway Technology, Architectural-Structural Engineering Technician and Construction Management Technician.
4. Students wishing to transfer onto a four-year degree and want to pursue Calculus courses at Gateway should see an advisor for transfer details regarding math class options instead of taking 804-134.
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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Criminal Justice Studies (10-504-5)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/criminal-justice-studies. Please see your academic advisor for additional information.

K-D = Kenosha/days, O = Online; F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	K-D	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*504-900	3	Intro to Criminal Justice		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*504-902	3	Criminal Law		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*504-174	3	Intro to Security			F	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
1	103-143	3	Computers for Professionals			F	F
2	*504-172	3	Introduction to Corrections			S	S
2	*504-903	3	Professional Communications		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	*504-905	3	Report Writing			S	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S
2	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Criminal Justice Studies (10-504-5) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	K-D	O
3	*504-148	3	Rules of Evidence	Prereq: 801-136; 804-134 OR 804-135		F/S/SU	F/S/SU
3	*504-168	3	Criminal Justice Administration			F/S/SU	F/S/SU
3	*504-177	3	Introduction to Criminology			F/S/SU	F/S/SU
3	*504-907	3	Community Policing Strategies			F/S/SU	F/S/SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU	F/S/SU
4	*504-169	3	Criminal Justice Internship	Prereq: 504-900; 504-903; 504-905		F/S/SU	F/S/SU
4	*504-178	3	Trends in Criminal Justice			F/S/SU	F/S/SU
4	*504-901	3	Constitutional Law	Prereq: 504-902; Coreq: 504-148		F/S/SU	F/S/SU
4	*504-906	3	Criminal Investigation Theory			F/S/SU	F/S/SU
4	801-196	3	Oral/Interpersonal Communications			F/S/SU	F/S/SU

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Criminal Justice Studies (10-504-5)

Criminal Justice Studies is a two-year associate degree program that prepares students for positions in a variety of law enforcement careers at the state, local, and federal levels, as well as in the field of private security. Students study the law enforcement field plus physical and behavioral sciences to meet the demands of the police profession, including criminal investigation, traffic law, patrol procedures, and scientific crime laboratory.

Program Learning Outcomes

Graduates will be able to:

1. Illustrate the interrelationships of the three core components of the criminal justice system.
2. Analyze situational responses.
3. Apply communication skills as a criminal justice professional.
4. Conduct investigations.
5. Examine the professional code of ethics for a criminal justice practitioner.
6. Explore personal wellness strategies for the criminal justice professions.
7. Explain the role of criminal justice professionals in working with diverse populations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
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5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Students must submit official high school, GED, or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students wishing to demonstrate proficiency in Spanish are encouraged to enroll in 90-802-4 Spanish Proficiency for First Responders (internal certificate). See an advisor for details.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Criminal Justice Studies (10-504-5)

Associate of Applied Science

Effective 2026/2027

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K-D = Kenosha/days, O = Online; F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*504-900	3	Intro to Criminal Justice		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*504-902	3	Criminal Law		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*504-174	3	Intro to Security			S
2	*504-903	3	Professional Communications		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*504-172	3	Introduction to Corrections			SU
3	*504-905	3	Report Writing			SU
3	103-143	3	Computers for Professionals			SU

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Criminal Justice Studies (10-504-5) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*504-168	3	Criminal Justice Administration			F
4	*504-907	3	Community Policing Strategies			F
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*504-148	3	Rules of Evidence	Prereq: 801-136; 804-134 OR 804-135		S
5	*504-177	3	Introduction to Criminology			S
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
6	*504-178	3	Trends in Criminal Justice			SU
6	*504-901	3	Constitutional Law	Prereq: 504-902; Coreq: 504-148		SU
6	801-196	3	Oral/Interpersonal Communications			SU
7	*504-169	3	Criminal Justice Internship	Prereq: 504-900; 504-903; 504-905		F
7	*504-906	3	Criminal Investigation Theory			F

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Criminal Justice Studies (10-504-5)

Criminal Justice Studies is a two-year associate degree program that prepares students for positions in a variety of law enforcement careers at the state, local, and federal levels, as well as in the field of private security. Students study the law enforcement field plus physical and behavioral sciences to meet the demands of the police profession, including criminal investigation, traffic law, patrol procedures, and scientific crime laboratory.

Program Learning Outcomes

Graduates will be able to:

1. Illustrate the interrelationships of the three core components of the criminal justice system.
2. Analyze situational responses.
3. Apply communication skills as a criminal justice professional.
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5. Examine the professional code of ethics for a criminal justice practitioner.
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Essential Career Competencies

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Admission Requirements

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3. Students must submit official high school, GED, or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

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Notes

1. Students wishing to demonstrate proficiency in Spanish are encouraged to enroll in 90-802-4 Spanish Proficiency for First Responders (internal certificate). See an advisor for details.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Protective and Human Services

Culinary Arts (10-316-1)

Associate of Applied Science

Effective 2026/2027

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R-D = Racine/days, E-D = Elkhorn/days F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	R-D	E-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*316-150	4	Culinary Basics	Coreq: 316-170	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	F	F
1	*316-151	4	Basic Baking	Coreq: 316-170	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	F	F
1	*316-170	1	Sanitation and Hygiene		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	F	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
2	*316-152	4	Intermediate Culinary	Prereq: 316-170; 316-150 OR 316-131	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	S	S
2	*316-153	3	Garde Manger/Cold Kitchen	Prereq: 316-170; 316-150 OR 316-131	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	S	S
2	*316-154	3	Advanced Baking	Prereq: 316-170; 316-151 OR 316-140	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Culinary Arts (10-316-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	R-D	E-D
3	*316-155	2	Culinary Internship	Prereq: 316-152 OR 316-132; 801-136; 804-134 OR 804-135	• Students must pass all 316 Culinary courses with a C or better to move on to the next course	SU	SU
3	801-196	3	Oral/Interpersonal Communications			SU	SU
3	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU	SU
4	*316-109	3	Short Order Deli	Prereq: 316-152 OR 316-131	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	F	F
4	*316-133	3	Menu Planning, Purchasing, Cost Control		• Students must pass all 316 Culinary courses with a C or better to move on to the next course	F	F
4	*316-156	4	Restaurant Cuisine	Prereq: 316-152 OR 316-131	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	F	F
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
5	*316-105	4	International Cuisine	Prereq: 316-156 OR 316-132	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	S	S
5	*316-125	4	Fine Dining	Prereq: 316-156 OR 316-132; 316-109; 316-153 OR 316-134; 316-154; 804-134 OR 804-135; 801-136	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	S	S
5	*316-130	2	Nutrition	Prereq: 316-170	• A uniform and knife kit are required for this program. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course	S	S
5	*316-157	3	Managing Food Service Operations	Coreq: 316-125	• Students must pass all 316 Culinary courses with a C or better to move on to the next course	S	S

Minimum Program Total Credits Required: 60

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Culinary Arts (10-316-1)

Culinary Arts places emphasis on food purchasing, specialty food preparation, dining room operation, and quantity food preparation sanitation. In addition to the business aspects of restaurant operations, this program includes extensive hands-on preparation of different foods. Students completing the program are certified in sanitation and qualified for employment as cafeteria managers, restaurant cooks, concession managers, and specialty cooks.

Program Learning Outcomes

Graduates of the Culinary Arts Associate Degree Program should be able to:

1. Apply principles of safety and sanitation in food service operations.
2. Apply principles of nutrition.
3. Demonstrate culinary skills.
4. Manage food service operations.
5. Plan menus.
6. Analyze food service financial information.
7. Relate food service operations to sustainability.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 60 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Diesel Equipment Technology (10-412-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/diesel-equipment-technology. Please see your academic advisor for additional information.

HZ-D = Horizon Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*412-111	2	Diesel Maintenance Fundamentals		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*412-116	3	Diesel Preventative Maintenance	Prereq: 412-111		F
1	*412-106	4	Diesel Brake Systems	Prereq: 412-111		F
1	*412-117	3	Diesel Suspension & Steering Systems	Prereq: 412-111	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*412-112	4	Diesel Drive Trains	Coreq: 804-134 OR 804-135		S
2	*412-107	4	Diesel Electricity 1	Prereq: 412-111	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	801-196	3	Oral/Interpersonal Communication			S+
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.
(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Diesel Equipment Technology (10-412-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-D
3	*412-114	3	Diesel Heating, Cooling & Air Cond	Prereq: 412-107; Coreq: 801-136		SU
3	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
4	*412-109	5	Diesel Engine Service	Prereq: 412-110		F
4	*412-108	3	Diesel Electricity 2	Prereq: 412-107; 804-134 OR 804-135		F
4	*412-110	3	Diesel Fuel Systems	Prereq: 412-116		F
4	809-198	3	Psychology, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+
5	*412-113	3	Diesel Fuel Systems – Advanced	Prereq: 412-110; 412-108		S
5	*412-105	4	Diesel Control Systems – Advanced	Prereq: 412-115; 412-117		S
5	*412-115	2	Diesel Hydraulic Systems	Prereq: 412-111; 804-134 OR 804-135		S
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
5	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		S

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Diesel Equipment Technology (10-412-1)

Diesel Equipment Technology is a two-year repair and maintenance program designed to prepare an entry level diesel technician. Program instruction will include over the road, off road and stationary applications. Emphasis will be placed on operational fundamentals and repair of diesel engines, and diesel vehicle systems including brakes, heating, and cooling systems. Technical skills will be developed in diagnosing and repair of advanced engine and system controls.

Program Learning Outcomes

Graduates will be able to:

1. Diagnose, repair and service brake systems.
2. Diagnose, repair and service steering & suspension systems.
3. Diagnose, repair and service electrical/electronic systems.
4. Diagnose, repair and service HVAC systems.
5. Diagnose, repair and service drive train systems.
6. Diagnose, repair and service hydraulic systems.
7. Diagnose, repair and service diesel engines.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

443-101 Forklift Operation & Maintenance	461-120 Small Power Equipment
412-123 Diesel Equipment Tech. Internship	801-197 Technical Reporting
442-101 Welding Basics	809-195 Economics
442-102 Introduction to Welding	

Notes

1. Tablet computer required for this program. See an advisor for a fact sheet describing minimum requirements.
2. Work uniforms are required. See an advisor for details.
3. Safety glasses are required in labs. If prescription safety glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.
4. A state issued Commercial Driver License (CDL) is not required for the program but highly recommended. Gateway Technical College will offer CDL training starting May 2019.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Protective and Human Services

Early Childhood Education (10-307-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/early-childhood-education. Please see your academic advisor for additional information.

O=Online, R-E = Racine/evenings F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O	R-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	S	F
1	*307-148	3	ECE: Foundations of Early Childhood Education		• Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.	S	F
1	*307-167	3	ECE: Health, Safety & Nutrition		• Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.	S	F
1	*307-179	3	ECE: Child Development		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.	S	F
1	*307-160	3	ECE: Field Experience 1	Coreq: 307-148; 307-167; 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must submit all health and immunization forms prior to the first day of attending all first-semester courses. • Admitted students must submit an Official High School Transcript or GED/HSED Credential, including a graduation or passing date and complete a WI Department of Children and Families Background Check prior to registering for this course. Additional details regarding these requirements can be found under Admission Requirements on the Early Childhood Program Page.	S+	F+
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	F
2	*307-110	3	ECE: Soc S, Art, and Music			F	S
2	*307-188	3	ECE: Guiding Children's Behavior		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	S
2	*307-108	3	ECE: Early Language & Literacy			F	S
2	*307-170	3	ECE: Field Experience 2	Prereq: 307-160 Coreq: 307-179		F+	S+
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	S

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students will complete off site -daytime student teaching requirements in an early care and education program. Please see an advisor for details.

Early Childhood Education (10-307-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O	R-E
3	*307-151	3	ECE: Infant & Toddler Development			S	F
3	*307-195	3	ECE: Family and Community Relationships			S	F
3	*307-112	3	ECE: STEM	Coreq: 307-148		S	F
3	*307-190	3	ECE: Field Experience 3	Prereq: 307-170; 801-136 Coreq: 307-151; 804-134 OR 804-135		S+	F+
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	F
4	*307-187	3	ECE: Children with Differing Abilities			F	S
4	*307-210	3	ECE: Field Experience 4	Prereq: 307-108; 307-110; 307-112; 307-190		F+	S+
4	801-196	3	Oral/Interpersonal Communication			F	S
4	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	S
4	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F	S

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students will complete off site -daytime student teaching requirements in an early care and education program. Please see an advisor for details.

Early Childhood Education (10-307-1)

Early Childhood Education prepares students to work as teacher-caregivers in early childhood settings. It combines hands-on fieldwork in area centers with related academic work at the college. Graduates become responsible for the care and education of children in the birth-to-eight-years age range. They create and maintain safe and healthy play environments, guide behavior, plan and implement learning activities, and work cooperatively with staff and parents.

Program Learning Outcomes

Graduates will be able to:

1. Apply child development theory to practice.
2. Cultivate relationships with children, family, and the community.
3. Assess child growth and development.
4. Use best practices in teaching and learning.
5. Demonstrate professionalism.
6. Integrate health, safety, and nutrition practices.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Prior to registration in core program courses, students must complete a background check and submit an official high school, GED or HSED transcript including a graduation or passing date.
4. 4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Background checks for the ECE program are valid for five years.
2. Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.
3. Complete the State of Wisconsin Background Check Request. Once complete print the document to physically sign it and email it to admissionsgroup@gtc.edu with Early Childhood Education BCR in the subject line. Directions for ordering your Background Check will be sent to the mailing address you provide on your Background Check Request. Please email your Preliminary or Final Background Check-Eligibility Letter to admissionsgroup@gtc.edu with Early Childhood Education Background Check in the subject line.
4. Gateway has many articulation agreements with four-year colleges and universities. If you are planning on transferring to a four-year institution please review this information online at gtc.edu/transfer. If an institution is not listed, please contact them directly to see which courses transfer. You may also contact your advisor for more information.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Protective and Human Services

Early Childhood Education (10-307-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/early-childhood-education. Please see your academic advisor for additional information.

O=Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S
1	*307-148	3	ECE: Foundations of Early Childhood Education		• Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.	F/S
1	*307-167	3	ECE: Health, Safety & Nutrition		• Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.	F/S
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S
2	*307-110	3	ECE: Soc S, Art, and Music			S/SU
2	*307-188	3	ECE: Guiding Children's Behavior		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/SU
2	*307-160	3	ECE: Field Experience 1	Coreq: 307-148; 307-167; 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. Students must submit all health and immunization forms prior to the first day of attending all first-semester courses. • Students must submit all health and immunization forms prior to the first day of attending all first-semester courses. • Admitted students must submit an Official High School Transcript or GED/HSED Credential, including a graduation or passing date and complete a WI Department of Children and Families Background Check prior to registering for this course. Additional details regarding these requirements can be found under Admission Requirements on the Early Childhood Program Page.	S+/SU
3	*307-179	3	ECE: Child Development		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.	SU/F
3	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/F

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students will complete off site -daytime student teaching requirements in an early care and education program. Please see an advisor for details.

Early Childhood Education (10-307-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
4	*307-170	3	ECE: Field Experience 2	Prereq: 307-160 Coreq: 307-179		F+/S
4	*307-151	3	ECE: Infant & Toddler Development			F/S
4	*307-195	3	ECE: Family and Community Relationships			F/S
5	*307-190	3	ECE: Field Experience 3	Prereq: 307-170; 801-136 Coreq: 307-151; 804-134 OR 804-135		S+/SU
5	*307-108	3	ECE: Early Language & Literacy			S/SU
5	801-196	3	Oral/Interpersonal Communication			S/SU
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/F
6	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		SU/F
7	*307-112	3	ECE: STEM	Coreq: 307-148		F/S
7	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S
8	*307-187	3	ECE: Children with Differing Abilities			S/SU
8	*307-210	3	ECE: Field Experience 4	Prereq: 307-108; 307-110; 307-112; 307-190		S+/SU

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students will complete off site -daytime student teaching requirements in an early care and education program. Please see an advisor for details.

Early Childhood Education (10-307-1)

Early Childhood Education prepares students to work as teacher-caregivers in early childhood settings. It combines hands-on fieldwork in area centers with related academic work at the college. Graduates become responsible for the care and education of children in the birth-to-eight-years age range. They create and maintain safe and healthy play environments, guide behavior, plan and implement learning activities, and work cooperatively with staff and parents.

Program Learning Outcomes

Graduates will be able to:

1. Apply child development theory to practice.
2. Cultivate relationships with children, family, and the community.
3. Assess child growth and development.
4. Use best practices in teaching and learning.
5. Demonstrate professionalism.
6. Integrate health, safety, and nutrition practices.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Prior to registration in core program courses, students must complete a background check and submit an official high school, GED or HSED transcript including a graduation or passing date.
4. 4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Background checks for the ECE program are valid for five years.
2. Students must submit all health and immunization forms prior to the first day of attending all first-semester courses.
3. Complete the State of Wisconsin Background Check Request. Once complete print the document to physically sign it and email it to admissionsgroup@gtc.edu with Early Childhood Education BCR in the subject line. Directions for ordering your Background Check will be sent to the mailing address you provide on your Background Check Request. Please email your Preliminary or Final Background Check-Eligibility Letter to admissionsgroup@gtc.edu with Early Childhood Education Background Check in the subject line.
4. Gateway has many articulation agreements with four-year colleges and universities. If you are planning on transferring to a four-year institution please review this information online at gtc.edu/transfer. If an institution is not listed, please contact them directly to see which courses transfer. You may also contact your advisor for more information.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Electrical Engineering Technology (10-662-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/eet. Please see your academic advisor for additional information.

I-D = iMET Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*605-113	3	DC/AC I		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*605-130	4	Digital Electronics			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+
1	804-115	5	College Technical Math 1	Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+
2	*605-114	3	DC/AC II	Prereq: 605-113; Coreq: 804-115		S
2	*605-120	4	Electronic Devices I	Prereq: 605-113		S
2	801-197	3	Technical Reporting	Prereq: 801-136		S+
2	804-197	5	College Algebra & Trig w Apps	Prereq: 804-115 OR 804-114		S+
3	*605-121	4	Electronic Devices II	Prereq: 605-120		SU
3	*806-154	4	General Physics 1	Prereq: 804-115 OR 804-197 OR 804-198		SU+
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Electrical Engineering Technology (10-662-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D
4	*605-133	3	Industrial Data Communications	Prereq: 605-113 OR 605-107		F
4	*605-190	4	Microprocessors	Coreq: 605-114; 605-121; 801-197		F
4	*662-105	3	Advanced Circuits	Prereq: 605-114; 804-197		F
4	*804-198	4	Calculus 1	Prereq: 804-197		F+
5	*605-150	3	Industrial Electronics	Prereq: 605-114; 605-120		S
5	*662-106	3	Advanced Electronics	Prereq: 605-120; 662-105		S
5	*804-181	4	Calculus 2	Prereq: 804-198		S+
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+

Minimum Program Total Credits Required: 69

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Electrical Engineering Technology (10-662-1)

Electrical Engineering Technology focuses on the installation, maintenance, modification, diagnosis, and troubleshooting of a wide variety of electronic equipment. In addition to comprehensive training in electronic theory, lab experience is an integral part of the program. The study areas include AC/DC principles, transistor operation, digital circuits, microprocessors, optoelectronics, communications, and industrial electronics.

Program Learning Outcomes

Graduates will be able to:

1. Apply electronic theory to practice.
2. Operate test equipment.
3. Build electronic circuits and systems.
4. Evaluate the operation of electronic circuits or systems.
5. Communicate technical information.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 69 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription safety glasses are necessary, please allow a minimum of 90 days before the program start to obtain prescription and glasses.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Electrical Engineering Technology (10-662-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/eet. Please see your academic advisor for additional information.

I-D = iMET Center/days, I-E = iMET Center/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D	I-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+	F+
1	*605-113	3	DC/AC I		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	804-115	5	College Technical Math 1	Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+	F+
2	*605-114	3	DC/AC II	Prereq: 605-113; Coreq: 804-115		S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S+
2	804-197	5	College Algebra & Trig w Apps	Prereq: 804-115 OR 804-114		S+	S+
3	801-197	3	Technical Reporting	Prereq: 801-136		SU+	SU+
3	*806-154	4	General Physics 1	Prereq: 804-115 OR 804-197 OR 804-198		SU+	SU+
4	*605-130	4	Digital Electronics			F	F
4	*605-133	3	Industrial Data Communications	Prereq: 605-113 OR 605-107		F	F

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Electrical Engineering Technology (10-662-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D	I-E
5	*605-120	4	Electronic Devices I	Prereq: 605-113		S	S
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S+
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+	SU+
6	*605-121	4	Electronic Devices II	Prereq: 605-120		SU	SU
7	*605-190	4	Microprocessors	Coreq: 605-114; 605-121; 801-197		F	F
7	*662-105	3	Advanced Circuits	Prereq: 605-114; 804-197		F	F
7	*804-198	4	Calculus 1	Prereq: 804-197		F+	F+
8	*605-150	3	Industrial Electronics	Prereq: 605-114; 605-120		S	S
8	*662-106	3	Advanced Electronics	Prereq: 605-120; 662-105		S	S
8	*804-181	4	Calculus 2	Prereq: 804-198		S+	S+

Minimum Program Total Credits Required: 69

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Electrical Engineering Technology (10-662-1)

Electrical Engineering Technology focuses on the installation, maintenance, modification, diagnosis, and troubleshooting of a wide variety of electronic equipment. In addition to comprehensive training in electronic theory, lab experience is an integral part of the program. The study areas include AC/DC principles, transistor operation, digital circuits, microprocessors, optoelectronics, communications, and industrial electronics.

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Graduates will be able to:

1. Apply electronic theory to practice.
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1. Communication Competence
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3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 69 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription safety glasses are necessary, please allow a minimum of 90 days before the program start to obtain prescription and glasses.

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Funeral Service (10-528-1)

Shared Program with MATC

Associate of Applied Science

Effective 2026/2027

Funeral Service (10-528-1)

This is a shared program with Milwaukee Area Technical College (MATC).

This program prepares you for a career as a licensed funeral director and embalmer in a profession that demands compassion, dedication and creativity. Our rigorous curriculum trains students to become among the best funeral directors in the expanding death-care profession. Once accepted into the program, students are immersed in all facets of the funeral profession.

Students are provided a variety of unique learning opportunities through lectures, hands-on labs, field trips, seminars, guest speakers and internships. Facilities include classrooms, state-of-the-art embalming and restorative art labs, arrangement conference room, merchandise selection room and funeral chapel. Students who complete the program will earn an associate degree and be eligible to take the National Board Exam for funeral directors (required for licensure). Coursework will include embalming, arranger training, grief studies, business management, religious funeral practices, regulatory compliance and more.

Program Requirements

Consult the MATC website for program and admission requirements at https://www.matc.edu/course-catalog/community-human-services/funeral-service.html

Graduation Requirements

Consult the MATC website for graduation requirements at http://www.matc.edu/.

Gateway Admission Requirements

1. To indicate your intent to complete this program, please submit the free program application with Gateway Technical College.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing and math placement assessments.
3. Students are selected for core program coursework at MATC based on application date and completion of academic preparedness requirements.
4. MATC has additional admission requirements for their portion of this program. Please consult with MATC for details.
5. This is a high demand program that uses a priority placement process for enrollment in core program courses at MATC. Students are selected based on application date and completion of academic preparedness requirements.

Program Learning Outcomes

Graduates will be able to:

1. Explain the importance of funeral service professionals in developing relationships with the families and communities they serve.
2. Identify standards of ethical conduct in funeral service practice.
3. Interpret how federal, state, and local laws apply to funeral service in order to ensure compliance.
4. Apply principles of public health and safety in the handling and preparation of human remains.
5. Demonstrate technical skills in embalming and restorative art that are necessary for the preparation and handling of human remains.
6. Demonstrate skills required for conducting arrangement conferences, visitations, services, and ceremonies.
7. Describe the requirements and procedures for burial, cremation, and other accepted forms of final disposition of human remains.
8. Describe methods to address the grief-related needs of the bereaved.
9. Explain management skills associated with operating a funeral establishment.
10. Demonstrate verbal and written communication skills and research skills needed for funeral service practice.

Gateway Course Requirements

Students choosing to start the Funeral Service program at Gateway are able to complete up to 30 credits toward the degree at MATC. All courses will satisfy program requirements in the Funeral Service program under the shared agreement as long as minimum requirements have been met. Consult the MATC website for requirements at https://www.matc.edu/course-catalog/community-human-services/funeral-service.html

Term	Course Number	Course Title	Credits	Requisites
1	801-136	English Composition 1	3	Prereq: 831-103 OR 851-757
1	801-196 OR 801-198	Oral/Interpersonal Comm. OR Speech	3	
1	806-177	Gen. Anatomy & Phys.	4	Prereq: 838-105 OR 851-757 OR 831-107
1	809-198	Psychology, Intro to	3	Prereq: 838-105 OR 851-757
1	809-196	Sociology, Intro to	3	Prereq: 838-105 OR 851-757
2	806-197	Microbiology	4	Prereq: 806-105 OR 806-177 OR 806-196 OR 206-238
2	806-134	General Chemistry	4	
2	101-112	Accounting for Business	3	
2	102-160	Business Law	3	

Notes

1. Students will be admitted to the program and receive financial aid through MATC. To apply, visit https://www.matc.edu/apply/index.html
2. A satisfactory placement test score (or successful remediation) is required prior to enrollment. See a Gateway advisor for details.
3. Students completing the shared program will receive their degree from Milwaukee Area Technical College.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Graphic Design (10-201-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/graphic-design. Please see your academic advisor for additional information.

E-D = Elkhorn/days, I-D = iMET/days, O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	E-D	I-D	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F	S
1	*201-100	4	Design Concepts		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F	S
1	*201-101	3	Comp. Illustration & Drawing Tech			F	F	S
1	*201-102	3	Digital Photography for Designers 1			F	F	S
1	*201-103	3	Illustration Media Concepts			F	F	S
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F	S
2	*201-104	3	Web Page Design For Graphic Designers	Prereq: 201-102 OR 204-107		S	S	SU
2	*201-105	3	Multimedia Survey			S	S	SU
2	*201-106	4	Design Publishing & Prepress	Prereq: 201-100 OR 204-100	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S	SU
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S	SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Graphic Design (10-201-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	E-D	I-D	O
3	*201-107	3	Graphic Design Professional Practices	Prereq: 201-106 OR 204-140; 801-136; 804-134 OR 804-135	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F	F
3	*201-108	3	Advanced Problems in Graphic Design	Prereq: 201-106 OR 204-140		F	F	F
3	*201-109	4	Advanced Design Concepts	Prereq: 201-106 OR 204-140		F	F	F
3	801-197	3	Technical Reporting	Prereq: 801-136		F	F	F
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F	F
4	*201-110	3	Applied Exit Strategies	Coreq: 201-107 OR 204-109		S	S	S
4	*201-111	3	Advanced Illustration	Prereq: 201-101 OR 204-105		S	S	S
4	*201-112	3	Digital Photography for Designers 2	Prereq: 201-102 OR 204-107		S	S	S
4	801-198	3	Speech			S	S	S
4	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S	S

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Graphic Design (10-201-1)

Graphic Design educates students in the practice of design, illustration, and reproductive processes related to the print and audio visual media. Course work includes basic illustration, visual communication, and reproductive concepts with emphasis on development in computer graphic skills. The program includes certain aspects of commercial art and communication/computer graphics, with emphasis on skills training required for the increasingly technological focus of graphic design in today's workplace.

Program Learning Outcomes

Graduates will be able to:

1. Apply principles of design to develop strategic marketing and communication products and services.
2. Demonstrate proficiency in the use of design software, tools, and technology.
3. Implement creative solutions from concept through completion using a formal process.
4. Apply effective legal and ethical business practices and project management skills.
5. Communicate artwork rationale in formal and informal settings.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 66 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Gateway has many articulation agreements with four-year colleges and universities. If you are planning on transferring to a four-year institution please review this information online at gtc.edu/transfer. If an institution is not listed, please contact them directly to see which courses transfer. You may also contact your advisor for more information.
2. The Graphic Design program at Gateway Technical College is a laptop program. Every student enrolled in the program should acquire a laptop that meets recommended specifications to utilize inside and outside of the classroom. To best meet the demands of the industry, students will be subscribing to and working with the Adobe Creative Cloud. To ensure optimum hardware performance we recommend meeting the computer specifications as outlined on the Adobe Creative Cloud website: http://helpx.adobe.com/creative-cloud/system-requirements.html

Accreditation Statement

Gateway Technical College's Graphic Design program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs [www.acbsp.org].

Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213
Phone: (913) 339-9356
www.acbsp.org

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Business and Transportation

Graphic Design (10-201-1)

Associate of Applied Science

Effective 2026/2027

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E-D = Elkhorn/days, I-D = iMET/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	E-D	I-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*201-100	4	Design Concepts		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
2	*201-101	3	Comp. Illustration & Drawing Tech			S	S
2	*201-102	3	Digital Photography for Designers 1			S	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S
3	*201-106	4	Design Publishing & Prepress	Prereq: 201-100 OR 204-100	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU	SU
3	801-197	3	Technical Reporting	Prereq: 801-136		SU	SU
4	*201-103	3	Illustration Media Concepts			F	F
4	*201-108	3	Advanced Problems in Graphic Design	Prereq: 201-106 OR 204-140		F	F
4	*201-109	4	Advanced Design Concepts	Prereq: 201-106 OR 204-140		F	F

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Graphic Design (10-201-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	E-D	I-D
5	*201-104	3	Web Page Design For Graphic Designers	Prereq: 201-102 OR 204-107		S	S
5	*201-105	3	Multimedia Survey			S	S
6	801-198	3	Speech			SU	SU
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU	SU
7	*201-107	3	Graphic Design Professional Practices	Prereq: 201-106 OR 204-140; 801-136; 804-134 OR 804-135	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
7	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
8	*201-110	3	Applied Exit Strategies	Coreq: 201-107 OR 204-109		S	S
8	*201-111	3	Advanced Illustration	Prereq: 201-101 OR 204-105		S	S
8	*201-112	3	Digital Photography for Designers 2	Prereq: 201-102 OR 204-107		S	S

Minimum Program Total Credits Required: 61

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Notes

1. Gateway has many articulation agreements with four-year colleges and universities. If you are planning on transferring to a four-year institution please review this information online at gtc.edu/transfer. If an institution is not listed, please contact them directly to see which courses transfer. You may also contact your advisor for more information.
2. The Graphic Design program at Gateway Technical College is a laptop program. Every student enrolled in the program should acquire a laptop that meets recommended specifications to utilize inside and outside of the classroom. To best meet the demands of the industry, students will be subscribing to and working with the Adobe Creative Cloud. To ensure optimum hardware performance we recommend meeting the computer specifications as outlined on the Adobe Creative Cloud website: http://helpx.adobe.com/creative-cloud/system-requirements.html

Accreditation Statement

Gateway Technical College's Graphic Design program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs [www.acbsp.org].

Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213
Phone: (913) 339-9356
www.acbsp.org

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Greenhouse Operations (10-001-6)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/greenhouse-operations. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*001-185	3	Intro to Horticulture		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*001-143	3	Herbaceous Plants	Coreq: 001-185		F
1	*001-146	1	Sustainable Landscape		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*001-147	1	Soils and Plant Nutrition		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*001-148	1	Plant Pests and Beneficials			F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*001-128	3	Horticulture Marketing			S
2	*001-129	1	Pesticide Applicator Certification			S
2	*001-142	3	Vegetable Science			S
2	*001-151	3	Greenhouse Crops	Coreq: 804-134 OR 804-135; 801-136		S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	461-120	3	Small Power Equipment			S

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Greenhouse Operations (10-001-6) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	K-D
3	*001-111	3	Horticulture Practicum	Prereq: 001-147; 001-151		SU
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
4	*001-104	3	Greenhouse Systems	Prereq: 001-151		F
4	*001-130	3	Landscape Plants Trees/Shrubs Deciduous	Prereq: 001-185		F
4	*001-144	3	Floral Design I/Commercial			F
4	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*001-149	3	Horticulture Events			S
5	*001-154	3	Alternative Growing Methods	Prereq: 001-104; 001-151		S
5	*001-180	1	Horticulture Portfolio	Prereq: 001-130; 001-143; 001-147; 001-151		S
5	*104-104	3	Selling Principles			S
5	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 60

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Greenhouse Operations (10-001-6)

The Greenhouse Operations program trains students in greenhouse growing and operations, hydroponics, and retail garden center and floral shop management. Hands-on experience in a commercial greenhouse, ornamental gardens and an operating urban farm are part of the learning experience. Plant identification, care and culture are key elements of the program, as are technical and graphic skills, sustainable methods for plant care and creative approaches to problem solving and landscape design.

Program Learning Outcomes

Graduates will be able to:

1 Analyze growing media.
2 Diagnose plant health.
3 Communicate as a horticulture professional.
4 Apply design principles.
5 Provide horticulture maintenance.
6 Apply the principles of plant science.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1 Minimum 60 credits with a cumulative GPA of 2.0 or above.
2 *Average of 2.0 ("C") or above for these major courses.
3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Greenhouse Operations (10-001-6)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/greenhouse-operations. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*001-185	3	Intro to Horticulture		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760		F
2	*001-146	1	Sustainable Landscape		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*001-147	1	Soils and Plant Nutrition		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*001-148	1	Plant Pests and Beneficials			S
2	*001-151	3	Greenhouse Crops	Coreq: 804-134 OR 804-135; 801-136		S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*001-142	3	Vegetable Science			SU
3	*001-143	3	Herbaceous Plants	Coreq: 001-185		SU
4	*001-130	3	Landscape Plants Trees/Shrubs Deciduous	Prereq: 001-185		F
4	*001-144	3	Floral Design I/Commercial			F
4	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Greenhouse Operations (10-001-6) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	K-D
5	*001-128	3	Horticulture Marketing			S
5	*001-129	1	Pesticide Applicator Certification			S
5	461-120	3	Small Power Equipment			S
6	*001-111	3	Horticulture Practicum	Prereq: 001-147; 001-151		SU
6	*001-149	3	Horticulture Events			SU
7	*001-104	3	Greenhouse Systems	Prereq: 001-151		F
7	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
7	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
8	*001-154	3	Alternative Growing Methods	Prereq: 001-104; 001-151		S
8	*001-180	1	Horticulture Portfolio	Prereq: 001-130; 001-143; 001-147; 001-151		S
8	*104-104	3	Selling Principles			S

Minimum Program Total Credits Required: 60

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Greenhouse Operations (10-001-6)

The Greenhouse Operations program trains students in greenhouse growing and operations, hydroponics, and retail garden center and floral shop management. Hands-on experience in a commercial greenhouse, ornamental gardens and an operating urban farm are part of the learning experience. Plant identification, care and culture are key elements of the program, as are technical and graphic skills, sustainable methods for plant care and creative approaches to problem solving and landscape design.

Program Learning Outcomes

Graduates will be able to:

1 Analyze growing media.
2 Diagnose plant health.
3 Communicate as a horticulture professional.
4 Apply design principles.
5 Provide horticulture maintenance.
6 Apply the principles of plant science.

Essential Career Competencies

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1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1 Minimum 60 credits with a cumulative GPA of 2.0 or above.
2 *Average of 2.0 ("C") or above for these major courses.
3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Foundations of Teacher Education (10-522-2)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/foundations-teacher-education. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*522-103	3	EDU: Introduction to Educational Practices			F
1	*522-105	3	EDU: Behavior Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*522-106	3	EDU: Child and Adolescent Development		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*522-102	3	EDU: Techniques in Reading	Prereq: 838-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*522-107	3	EDU: Overview of Special Education			S
2	*522-118	3	EDU: Techniques in Math	Prereq: 804-134 OR 804-135		S
2	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	801-198	3	Speech			S
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
3	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Foundations of Teacher Education (10-522-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*522-112	3	EDU: Equity in Education			F
4	*522-114	3	EDU: Techniques in Language Arts	Prereq: 522-102; 801-136		F
4	*522-124	3	EDU: Supporting Students with Disabilities			F
4	*522-129	3	EDU: Practicum 1	Prereq: Advisor Consent	• This course requires advisor consent, which will only be given when proper physical and immunization records are submitted. Students must submit all health and immunization forms prior to the first day of attending these courses. • Admittance into the Foundations of Teacher Education program is required before taking this course. • Admitted students must submit an Official High School Transcript or GED/HSED Credential, including a graduation or passing date and order a background check and complete a background information disclosure (BID). Additional details regarding these requirements can be found under Admission Requirements on the Foundations of Teacher Education Program Page.	F
4	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 or 851-757		F
5	*522-104	3	EDU: Technology in Education			S
5	*522-119	3	EDU: Techniques in Social Studies			S
5	*522-120	3	EDU: Techniques in Science			S
5	*522-131	3	EDU: Practicum 2	Prereq: 522-129; 522-118; 522-114	• Admittance into the Foundations of Teacher Education program is required before taking this course.	S

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Foundations of Teacher Education (10-522-2)

Foundations of Teacher Education is an Associate of Applied Science degree, which prepares qualified individuals to work directly with students under the supervision of a licensed teacher. The duties include assisting children with math, reading, and writing assignments, as well as handling classroom management, clerical, and other tasks related to instruction. This program meets Title I requirements. Duties may also include monitoring student activities, correcting papers, tutoring, one-on-one activities, and small group facilitation. In addition, instructional assistants work on classroom displays, assist children with computers and media, and supervise various classroom and school events. Instructional assistants may be hired to provide instructional services to students from pre-k through high school; however, the focus of this program is on preparing grads to work primarily in elementary and middle school levels.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate instructional support strategies for content areas
2. Implement developmentally appropriate practices to foster learning
3. Adapt instruction to meet the diverse needs of all learners
4. Use proactive classroom management techniques
5. Perform professional responsibilities
6. Incorporate the reflective process to promote professional growth

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Prior to registration in core program courses students must complete a background disclosure form, criminal background check, and submit an official high school, GED or HSED transcript including a graduation or passing date.
4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Any course may be taken prior to entry in the program, assuming prerequisites and co-requisites have been satisfied (or waived with department approval).
2. Admitted students must submit an Official High School Transcript or GED/HSED Credential, including a graduation or passing date and order a background check and complete a background information disclosure (BID). Additional details regarding these requirements can be found under Admission Requirements on the Foundations of Teacher Education Program Page.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Protective and Human Services

Foundations of Teacher Education (10-522-2)

Associate of Applied Science

Effective 2026/2027

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O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*522-103	3	EDU: Introduction to Educational Practices			F
1	*522-106	3	EDU: Child and Adolescent Development		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*522-102	3	EDU: Techniques in Reading	Prereq: 838-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*522-119	3	EDU: Techniques in Social Studies			S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*522-105	3	EDU: Behavior Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
3	801-198	3	Speech			SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Foundations of Teacher Education (10-522-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*522-114	3	EDU: Techniques in Language Arts	Prereq: 522-102; 801-136		F
4	*522-129	3	EDU: Practicum 1	Prereq: Advisor Consent	• This course requires advisor consent, which will only be given when proper physical and immunization records are submitted. Students must submit all health and immunization forms prior to the first day of attending these courses. • Admittance into the Foundations of Teacher Education program is required before taking this course. • Admitted students must submit an Official High School Transcript or GED/HSED Credential, including a graduation or passing date and order a background check and complete a background information disclosure (BID). Additional details regarding these requirements can be found under Admission Requirements on the Foundations of Teacher Education Program Page.	F
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*522-104	3	EDU: Technology in Education			S
5	*522-118	3	EDU: Techniques in Math	Prereq: 804-134 OR 804-135		S
5	*522-120	3	EDU: Techniques in Science			S
6	*522-107	3	EDU: Overview of Special Education			SU
6	*522-124	3	EDU: Supporting Students with Disabilities			SU
6	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 or 851-757		SU
7	*522-112	3	EDU: Equity in Education			F
7	*522-131	3	EDU: Practicum 2	Prereq: 522-129; 522-118; 522-114	• Admittance into the Foundations of Teacher Education program is required before taking this course.	F

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Foundations of Teacher Education (10-522-2)

Foundations of Teacher Education is an Associate of Applied Science degree, which prepares qualified individuals to work directly with students under the supervision of a licensed teacher. The duties include assisting children with math, reading, and writing assignments, as well as handling classroom management, clerical, and other tasks related to instruction. This program meets Title I requirements. Duties may also include monitoring student activities, correcting papers, tutoring, one-on-one activities, and small group facilitation. In addition, instructional assistants work on classroom displays, assist children with computers and media, and supervise various classroom and school events. Instructional assistants may be hired to provide instructional services to students from pre-k through high school; however, the focus of this program is on preparing grads to work primarily in elementary and middle school levels.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate instructional support strategies for content areas
2. Implement developmentally appropriate practices to foster learning
3. Adapt instruction to meet the diverse needs of all learners
4. Use proactive classroom management techniques
5. Perform professional responsibilities
6. Incorporate the reflective process to promote professional growth

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

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2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

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3. Prior to registration in core program courses students must complete a background disclosure form, criminal background check, and submit an official high school, GED or HSED transcript including a graduation or passing date.
4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Any course may be taken prior to entry in the program, assuming prerequisites and co-requisites have been satisfied (or waived with department approval).
2. Admitted students must submit an Official High School Transcript or GED/HSED Credential, including a graduation or passing date and order a background check and complete a background information disclosure (BID). Additional details regarding these requirements can be found under Admission Requirements on the Foundations of Teacher Education Program Page.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Human Resources (10-116-1)

Associate of Applied Science

Effective 2026/2027

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O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*196-190	3	Leadership Development			F/S/SU
1	*196-191	3	Supervision			F/S/SU
1	*196-137 **OR** *196-136	3	Certified Service Specialist **OR** Safety in the Workplace			F/S/SU
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*196-134	3	Legal Issues for Supervisors			F/S/SU
2	*196-193	3	Human Resources Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
2	*196-169	3	Diversity and Change Management			F/S/SU
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			F/S/SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	*196-188	3	Project Management			F/S/SU
3	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Resources (10-116-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*196-133	3	Negotiations			F/S/SU
4	*196-189	3	Team Building and Problem Solving			F/S/SU
4	*116-101	3	Compensation & Benefits	Prereq: 196-134;196-193; 804-134 OR 804-135; 801-136		F/S/SU
4	*116-102	3	Training & Development	Prereq: 196-134; 196-193		F/S/SU
5	*116-103	3	Employee Relations & Engagement	Prereq: 196-134; 196-193		F/S/SU
5	*116-104	3	Recruitment and Selection	Prereq: 196-134; 196-193		F/S/SU
5	*101-112	3	Accounting for Business			F/S/SU
5	*116-105 **OR** *116-106	3	Human Resources Capstone **OR** Human Resources Internship	Prereq: Instructor Consent		F/S/SU

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Resources (10-116-1)

Human Resources is an integral component in the strategic advancement of any organization. This program will allow you the opportunity to gain new skills in specialized areas including recruitment, hiring, training and development, employee records, compensation and benefits. Students will explore employment law, occupational safety and health, equal employment opportunity, wages, healthcare, family leave and retirement plans. You will be well equipped for this rewarding and important field.

Program Learning Outcomes

Graduates will be able to:

1. Design an organizational workforce plan.
2. Develop training programs.
3. Analyze organizational total rewards programs.
4. Incorporate employment law into business practices.
5. Apply employees relations techniques.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Human Resources (10-116-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/hr-program. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*196-190	3	Leadership Development			F/S/SU
1	*196-191	3	Supervision			F/S/SU
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*196-137 **OR** *196-136	3	Certified Service Specialist **OR** Safety in the Workplace			F/S/SU
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	*196-134	3	Legal Issues for Supervisors			F/S/SU
3	*196-193	3	Human Resources Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
4	*196-169	3	Diversity and Change Management			F/S/SU
4	*196-188	3	Project Management			F/S/SU
4	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			F/S/SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Resources (10-116-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
5	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
5	*196-133	3	Negotiations			F/S/SU
5	*196-189	3	Team Building and Problem Solving			F/S/SU
6	*116-101	3	Compensation & Benefits	Prereq:196-134;196-193; 804-134 OR 804-135; 801-136		F/S/SU
6	*116-102	3	Training & Development	Prereq: 196-134; 196-193		F/S/SU
6	*101-112	3	Accounting for Business			F/S/SU
7	*116-103	3	Employee Relations & Engagement	Prereq: 196-134; 196-193		F/S/SU
7	*116-104	3	Recruitment and Selection	Prereq: 196-134; 196-193		F/S/SU
7	*116-105 **OR** *116-106	3	Human Resources Capstone **OR** Human Resources Internship	Prereq: Instructor Consent		F/S/SU

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Resources (10-116-1)

Human Resources is an integral component in the strategic advancement of any organization. This program will allow you the opportunity to gain new skills in specialized areas including recruitment, hiring, training and development, employee records, compensation and benefits. Students will explore employment law, occupational safety and health, equal employment opportunity, wages, healthcare, family leave and retirement plans. You will be well equipped for this rewarding and important field.

Program Learning Outcomes

Graduates will be able to:

1. Design an organizational workforce plan.
2. Develop training programs.
3. Analyze organizational total rewards programs.
4. Incorporate employment law into business practices.
5. Apply employees relations techniques.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Human Services Associate (10-520-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/human-service-associate. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	103-143	3	Computers for Professionals			F
1	*520-101	3	Human Services, Intro to			F
1	*520-105	3	Interviewing Principles & Documentation		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
1	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*520-110	3	Community Resources & Services			S
2	*520-115	3	Counseling, Introduction to	Prereq: 520-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*520-127	3	Professional Practices in Human Services		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Services Associate (10-520-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
3	*520-124	3	Field Experience I / Human Services	Prereq: 520-127; 801-136; 804-134 OR 804-135 Coreq: 520-140		F
3	*520-140	3	Group Counseling	Prereq: 520-115		F
3	*550-130	3	Alcohol/Drug Abuse Rehabilitation			F
3	801-196	3	Oral/Interpersonal Communication			F
3	*520-102	3	Crisis Intervention			F
4	*520-121	3	Field Experience II / Human Services	Prereq: 520-140: 520-124		S
4	*520-150	3	Gerontology/Introduction to			S
4	*520-128	3	Child Welfare		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
4	*520-151	3	Family Theory and Practice		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
4	*520-152	3	Aspects of Disabilities			S

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Services Associate (10-520-3)

Human Services Associate is designed to prepare people for entry level positions in a variety of human service agencies and social service programs. The Human Services Associate program includes a unique combination of the study of aspects of human services, general education subjects, and 300 hours of actual field experience in a community human service agency under the supervision of a working professional. If taken full-time, this program may be completed in four semesters of study.

Program Learning Outcomes

Graduates will be able to:

1. Model a commitment to multicultural competence.
2. Uphold the Ethical Standards and Values for Human Service Professionals.
3. Demonstrate professionalism.
4. Utilize community resources.
5. Apply human services interventions and best practices.
6. Cultivate professional relationships.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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Human Services Associate (10-520-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/human-service-associate. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*520-101	3	Human Services, Intro to			F
1	*520-105	3	Interviewing Principles & Documentation		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	103-143	3	Computers for Professionals			F
2	*520-110	3	Community Resources & Services			S
2	*520-115	3	Counseling, Introduction to	Prereq: 520-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	804-134	3	Mathematical Reasoning[1]	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*520-127	3	Professional Practices in Human Services		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	*520-140	3	Group Counseling	Prereq: 520-115		SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Services Associate (10-520-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
4	*550-130	3	Alcohol/Drug Abuse Rehabilitation			F
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
4	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*520-128	3	Child Welfare		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
5	*520-151	3	Family Theory and Practice		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
6	*520-102	3	Crisis Intervention			SU
6	*520-124	3	Field Experience I / Human Services	Prereq: 520-127; 801-136; 804-134 OR 804-135 Coreq: 520-140		SU
6	801-196	3	Oral/Interpersonal Communication			SU
7	*520-121	3	Field Experience II / Human Services	Prereq: 520-140: 520-124		F
7	*520-150	3	Gerontology/ Introduction to			F
7	*520-152	3	Aspects of Disabilities			F

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Human Services Associate (10-520-3)

Human Services Associate is designed to prepare people for entry level positions in a variety of human service agencies and social service programs. The Human Services Associate program includes a unique combination of the study of aspects of human services, general education subjects, and 300 hours of actual field experience in a community human service agency under the supervision of a working professional. If taken full-time, this program may be completed in four semesters of study.

Program Learning Outcomes

Graduates will be able to:

1. Model a commitment to multicultural competence.
2. Uphold the Ethical Standards and Values for Human Service Professionals.
3. Demonstrate professionalism.
4. Utilize community resources.
5. Apply human services interventions and best practices.
6. Cultivate professional relationships.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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Pathway to Success
https://www.gtc.edu/individualized-technical-studies

Individualized Technical Studies – (10-825-1)

Associate of Applied Science
Effective 2026/2027

Individualized Technical Studies (10-825-1)
Individualized Technical Studies is designed for individuals desiring to combine skills and knowledge from different academic disciplines. The degree is designed to meet specific educational needs of students whose career goals do not align with current academic programs. Career goals are identified with the input of the student, a Gateway advisor, and an occupational mentor. A portfolio is developed to define career goals, document appropriate learning experiences, and formulate a plan for degree completion. Courses from all departments within the college are available for utilization, with a minimum of 20 of these credits being focused in one specific discipline.

Essential Career Competencies
Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Students must provide a statement of need and summary of career goals, explaining in detail the need to pursue the Individualized Technical Studies program in lieu of an established program.
4. Students must provide proof of an occupational mentor who will provide industry-specific guidance throughout the program.
5. Students must submit an academic plan, designed in conjunction with an academic advisor and occupational mentor.

Program Requirements

1. The ITS degree is intended for individuals who have a specific career objective in mind that cannot be met by existing college degree programs.
2. The student is required to work under the direction of an occupational mentor so that the student and mentor are in complete agreement as to the curriculum identified, and place value on its contribution to the student and potential employers. These requirements are in place to prevent students or colleges from designing a program around what they perceive to be a workforce need but which employers do not value, leaving the student with an unmarketable set of skills.
3. Critical to a successful experience and graduation from this program will be the input of an occupational mentor. This real-world professional knows about the requirements and skills needed to be successful in the program of study. The mentor, with the assistance of a Gateway advisor, helps the student decide the combination of technical and general studies courses necessary to meet the job requirements of potential employers.
4. Upon completion of admission requirements, the College's Individualized Technical Studies Committee will review program application materials and provide final approval of student acceptance into the Individualized Technical Studies program.

Graduation Requirements

1. Minimum 60 credits with a cumulative GPA of 2.0 or above.
2. 40 credits Individualized Technical Studies courses (20 *must* be focused in one technical discipline)
3. 15 credits General Studies **required** from the following:
   a. 6 credits Communications
   b. 3 credits Social Science
   c. 3 credits Behavioral Science
4. 3 credits Mathematics and/or Natural Science
5. 25% of the total program credits must be completed at Gateway, and 25% of the 40 Individualized Technical Studies credits must be completed at Gateway.
6. Complete 890-155 Gateway to Success in first semester of program. See an advisor for details.

For a complete list of Graduation Requirements, check the Student Handbook.

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Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

IT – AI Data Specialist (10-156-3)

Associate of Applied Science

Effective 2026/2027

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O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*152-080	3	Databases		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*152-081	3	Programming in Python		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*156-106	3	Introduction to Generative AI			F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*156-100	3	Data Analytics 1	Prereq: 152-081		S
2	*156-102	3	Intro to Artificial Intelligence	Prereq: 152-081		S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	804-189	3	Statistics	Prereq: 804-134		S
3	*152-103	3	Advanced Programming in Python	Prereq: 152-081		SU
3	*156-103	3	Intro to Machine Learning	Prereq: 152-081		SU
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
3	809-198	3	Psychology, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – AI Data Specialist (10-156-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*156-101	3	Data Analytics 2	Prereq: 156-100; 152-080		F
4	*156-104	3	Natural Language Processing	Prereq: 156-102; 156-103		F
4	*156-120	3	Programming in R	Prereq: 156-100; 804-189		F
4	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F
5	*156-105	3	AI for Computer Vision	Prereq: 156-102; 156-103		S
5	*156-125	3	Business Intelligence and Visualization	Prereq: 156-101; 156-120 Coreq: 801-136		S
5	*156-130	3	Data Analytics Capstone	Prereq: 156-101; 156-120 Coreq: 156-125		S
5	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – AI Data Specialist (10-156-3)

The *IT – AI Data Specialist* program trains students to identify, utilize, and interpret data from various sources, and to visualize that data to resolve business questions that impact data-driven decisions. Topics will include using current technologies to work with large data sets, securing data from various sources, database technologies, computer programming in Python and R, statistical analysis of data, creating visualizations and business intelligence, and completing real-world projects. Typical entry-level positions for this training opportunity include Operations Research Analyst, Computer Systems Analyst, Database Specialist, Data Analyst, and Junior Data Scientist.

Program Learning Outcomes

Graduates will be able to:

1. Analyze data.
2. Query data.
3. Perform data extraction, transformation and loading (ETL).
4. Create reports.
5. Communicate with stakeholders.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

152-182 Web Programming 1	152-097 JavaScript
152-184 Java Programming 1	150-106 Intrusion Detection Systems
138-118 International Bizsquad	152-106 Swift Programming 1
152-107 Swift Programming 2	

Notes

1. Gateway has many articulation agreements with four-year colleges and universities. If you are planning on transferring to a four-year institution, please review this information online at gtc.edu/transfer. If an institution is not listed, please contact them directly to see which courses transfer. You may also contact your advisor for more information.
2. IT- AI Data Specialist is a laptop program. Students will need a Windows-based computer (with a hard drive) for use in the program. Please note MAC computers are not compatible with some of the required software.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

IT – AI Data Specialist (10-156-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/data. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*156-106	3	Introduction to Generative AI			F
1	*152-081	3	Programming in Python		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*156-100	3	Data Analytics 1	Prereq: 152-081		S
2	*156-102	3	Intro to Artificial Intelligence	Prereq: 152-081		S
2	804-189	3	Statistics	Prereq: 804-134		S
3	*152-080	3	Databases		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	*156-103	3	Intro to Machine Learning	Prereq: 152-081;		SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*156-101	3	Data Analytics 2	Prereq: 156-100; 152-080		F
4	*156-104	3	Natural Language Processing	Prereq: 156-102; 156-103		F
4	*156-120	3	Programming in R	Prereq: 156-100; 804-189		F

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – AI Data Specialist (10-156-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
5	*156-105	3	AI for Computer Vision	Prereq: 156-102; 156-103		S
5	*156-125	3	Business Intelligence and Visualization	Prereq: 156-101; 156-120 Coreq: 801-136		S
5	*156-130	3	Data Analytics Capstone	Prereq: 156-101; 156-120 Coreq: 156-125		S
6	*152-103	3	Advanced Programming in Python	Prereq: 152-081		SU
6	809-198	3	Psychology, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
6	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
7	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F
7	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			F

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – AI Data Specialist (10-156-3)

The *IT – AI Data Specialist* program trains students to identify, utilize, and interpret data from various sources, and to visualize that data to resolve business questions that impact data-driven decisions. Topics will include using current technologies to work with large data sets, securing data from various sources, database technologies, computer programming in Python and R, statistical analysis of data, creating visualizations and business intelligence, and completing real-world projects. Typical entry-level positions for this training opportunity include Operations Research Analyst, Computer Systems Analyst, Database Specialist, Data Analyst, and Junior Data Scientist.

Program Learning Outcomes

Graduates will be able to:

1. Analyze data.
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3. Perform data extraction, transformation and loading (ETL).
4. Create reports.
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Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

152-182 Web Programming 1	152-097 JavaScript
152-184 Java Programming 1	150-106 Intrusion Detection Systems
138-118 International Bizsquad	152-106 Swift Programming 1
152-107 Swift Programming 2	

Notes

1. Gateway has many articulation agreements with four-year colleges and universities. If you are planning on transferring to a four-year institution, please review this information online at gtc.edu/transfer. If an institution is not listed, please contact them directly to see which courses transfer. You may also contact your advisor for more information.
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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

https://www.gtc.edu/it-computer-support-specialist

IT – Computer Support Specialist (10-154-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/it-computer-support-specialist. Please see your academic advisor for additional information.

R-D = Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*107-011	3	IT in Business			F
1	*107-193	3	IT Essentials		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*150-152	3	IT Tech Skills			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*154-114	3	Hardware & Software Support	Prereq: 150-152 OR 107-193	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*154-119	3	System Software Support	Coreq: 801-136		S
2	*154-122	3	Introduction to Help/Service Desk	Prereq: 107-193	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	804-134 **OR** 804-115	3 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*150-145	3	IT Scripting			SU
3	801-197	3	Technical Reporting	Prereq: 801-136		SU
3	809-143 **OR** 809-195	3	Microeconomics **OR** Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
3	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		SU

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Computer Support Specialist (10-154-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
4	*154-113	3	IT Apps Server & Support	Prereq: 154-114		F
4	*154-112	3	Data Security & Recovery Support	Prereq: 154-114; 804-134 OR 804-135 OR 804-115		F
4	*154-120	3	Advanced Help/Service Desk	Prereq: 154-122		F
4	809-196 **OR** 809-172	3	Sociology, Introduction to **OR** Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*154-116	2	Emerging Technologies and Apps.	Prereq: 154-112		S
5	*154-118	3	CSS Skills Implementation & Career Prep	Prereq: 154-113; 801-197		S
5	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
5	*107-177	4	IT Project Management	Prereq: 154-113; 801-197		S

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Computer Support Specialist (10-154-3)

The *IT – Computer Support Specialist* program has been designed to prepare students for a career in Information Technology, providing end-user service and support in a variety of environments, including small business, not-for-profit and enterprise-sized corporations. Topics include the architecture, use, installation, and upgrading of hardware and software, operating systems, networking, and communications as well as data security and recovery. Students will evaluate user hardware and software needs, function as a liaison between their firm and outside contractors or vendors, research emerging technologies, and provide user training for both hardware and software.

This coursework starts you down the path to earn your A+, Security+, Network+, ITIL, MS Fundamentals and Google IT Support Professional.

Program Learning Outcomes

Graduates will be able to:

1 Manage information technology hardware.
2 Manage software.
3 Support computer networks.
4 Provide end user support.
5 Solve information technology problems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1 Minimum 66 credits with a cumulative GPA of 2.0 or above.
2 *Minimum of 2.0 ("C") or above for these major courses.
3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

154-109 IT-Computer Support Specialist Internship	150-114 Network Concepts – CCNA 1
156-018 Fundamentals of IT	152-080 Databases

Notes

1. See your advisor if you have questions about course selection.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

https://www.gtc.edu/it-computer-support-specialist

IT – Computer Support Specialist (10-154-3)

Associate of Applied Science

Effective 2026/2027

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R-D = Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*107-011	3	IT in Business			F
1	*107-193	3	IT Essentials		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*150-152	3	IT Tech Skills			F
2	*154-119	3	System Software Support	Coreq: 801-136		S
2	*154-122	3	Introduction to Help/Service Desk	Prereq: 107-193	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*154-114	3	Hardware & Software Support	Prereq: 150-152 OR 107-193	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	804-134 **OR** 804-115	3 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*154-112	3	Data Security & Recovery Support	Prereq: 154-114; 804-134 OR 804-135 OR 804-115		F
4	*154-113	3	IT Apps Server & Support	Prereq: 154-114		F
4	*154-120	3	Advanced Help/Service Desk	Prereq: 154-122		F

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Computer Support Specialist (10-154-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
5	801-197	3	Technical Reporting	Prereq: 801-136		S
5	809-196 **OR** 809-172	3	Sociology, Introduction to **OR** Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
6	*150-145	3	IT Scripting			SU
6	809-143 **OR** 809-195	3	Microeconomics **OR** Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
7	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
7	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F
8	*107-177	4	IT Project Management	Prereq: 154-113; 801-197		S
8	*154-116	2	Emerging Technologies and Apps.	Prereq: 154-112		S
8	*154-118	3	CSS Skills Implementation & Career Prep	Prereq: 154-113; 801-197		S

Minimum Program Total Credits Required: 61

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Computer Support Specialist (10-154-3)

The *IT – Computer Support Specialist* program has been designed to prepare students for a career in Information Technology, providing end-user service and support in a variety of environments, including small business, not-for-profit and enterprise-sized corporations. Topics include the architecture, use, installation, and upgrading of hardware and software, operating systems, networking, and communications as well as data security and recovery. Students will evaluate user hardware and software needs, function as a liaison between their firm and outside contractors or vendors, research emerging technologies, and provide user training for both hardware and software.

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Program Learning Outcomes

Graduates will be able to:

1. Manage information technology hardware.
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4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

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1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 66 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

154-109 IT-Computer Support Specialist Internship	150-114 Network Concepts – CCNA 1
156-018 Fundamentals of IT	152-080 Databases

Notes

1. See your advisor if you have questions about course selection.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Manufacturing, Engineering, and Information Technology

IT – Cybersecurity Specialist (10-151-2)

Associate of Applied Science

Effective 2026/2027

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O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*150-152	3	IT Tech Skills			F
1	*150-194	3	Network Security		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*150-114	3	Network Concepts–CCNA 1	Coreq: 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
1	804-134	3	Mathematical Reasoning[1]	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*150-106	3	Intrusion Detection Systems			S
2	*150-153	3	Net Admin MS Server 2022	Coreq: 150-114		S
2	*151-123	3	Cybersecurity			S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*151-124	3	Cybersecurity Technologies	Prereq: 151-123		SU
3	*150-124	3	Routing – CCNA 2	Prereq: 150-114		SU
3	*150-145	3	IT Scripting			SU
3	809-196	3	Sociology, Introduction to		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Cybersecurity Specialist (10-151-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	O
4	*150-150	3	Red Hat Enterprise Linux I	Prereq: 150-119 OR 150-153 Coreq: 801-136		F
4	*151-130	3	Cisco CyberOps (SOC)	Prereq: 151-123		F
4	*151-131	3	Managing and Configuring Firewalls	Prereq: 151-123		F
4	801-198	3	Speech			F
5	*151-121	3	AWS Cloud[2]	Prereq: 151-123		S
5	*151-122	3	Computer Security/Pen Test	Prereq: 151-130		S
5	*151-125	3	Cybersecurity: Attack and Defend	Prereq: 151-123		S
5	*151-132	3	SOC: Monitor/Secure the Infrastructure	Prereq: 151-130		S

Minimum Program Total Credits Required: 64

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Cybersecurity Specialist (10-151-2)

Cybersecurity Specialists monitor an organization's computer network, maintain system security and upgrade security measures to prevent computer security incidents and cyberattacks. Learn to protect data confidentiality, integrity and availability while learning ways to implement security mechanisms. Emphasis is placed on vigilant security awareness, identifying network threats and deploying appropriate incident responses. Through hands-on lab work, learners will build practical experience with topics such as penetration testing, log analysis, the implementation of firewalls, wireless security and incident response, as well as defenses and countermeasures. Learners will gain an understanding of legal and ethical issues associated with information security. Learners will analyze a variety of network operating systems, firewalls, virtual private networks (VPN), packet filters and intrusion detection systems (IDS) to maximize information security in the network.

Program Learning Outcomes

Graduates will be able to:

1. Identify security strategies.
2. Implement secure infrastructures.
3. Conduct security testing.
4. Analyze security data.
5. Mitigate risk.
6. Develop security documentation.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 64 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Manufacturing, Engineering, and Information Technology

IT – Cybersecurity Specialist (10-151-2)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cybersecurity Please see your academic advisor for additional information.

R-E = Racine/evenings, O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	R-E	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*150-152	3	IT Tech Skills			F	F
1	*150-194	3	Network Security		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
2	*150-114	3	Network Concepts–CCNA 1	Coreq: 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	*150-153	3	Net Admin MS Server 2022	Coreq: 150-114		S	S
2	*151-123	3	Cybersecurity		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
3	*150-124	3	Routing – CCNA 2	Prereq: 150-114		SU	SU
3	*150-145	3	IT Scripting			SU	SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU	SU
4	*151-130	3	Cisco CyberOps (SOC)	Prereq: 151-123		F	F
4	*151-131	3	Managing and Configuring Firewalls	Prereq: 151-123		F	F

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Cybersecurity Specialist (10-151-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	R-E	O
5	*150-106	3	Intrusion Detection Systems			S	S
5	*151-121	3	AWS Cloud	Prereq: 151-123		S	S
6	*151-124	3	Cybersecurity Technologies	Prereq: 151-123		SU	SU
6	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU	SU
7	*150-150	3	Red Hat Enterprise Linux I	Prereq: 150-119 OR 150-153 Coreq: 801-136		F	F
7	801-198	3	Speech			F	F
7	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
8	*151-122	3	Computer Security/Pen Test	Prereq: 151-130		S	S
8	*151-125	3	Cybersecurity: Attack & Defend	Prereq: 151-123		S	S
8	*151-132	3	SOC: Monitor/Secure the Infrastructure	Prereq: 151-130		S	S

Minimum Program Total Credits Required: 64

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Cybersecurity Specialist (10-151-2)

Cybersecurity Specialists monitor an organization's computer network, maintain system security and upgrade security measures to prevent computer security incidents and cyberattacks. Learn to protect data confidentiality, integrity and availability while learning ways to implement security mechanisms. Emphasis is placed on vigilant security awareness, identifying network threats and deploying appropriate incident responses. Through hands-on lab work, learners will build practical experience with topics such as penetration testing, log analysis, the implementation of firewalls, wireless security and incident response, as well as defenses and countermeasures. Learners will gain an understanding of legal and ethical issues associated with information security. Learners will analyze a variety of network operating systems, firewalls, virtual private networks (VPN), packet filters and intrusion detection systems (IDS) to maximize information security in the network.

Program Learning Outcomes

Graduates will be able to:

1. Identify security strategies.
2. Implement secure infrastructures.
3. Conduct security testing.
4. Analyze security data.
5. Mitigate risk.
6. Develop security documentation.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 64 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

IT – Network Specialist (10-150-2)

Associate of Applied Science

Effective 2026/2027

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R-D = Racine/days, O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	R-D	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*150-152	3	IT Tech Skills			F	F
1	*150-114	3	Network Concepts–CCNA 1	Coreq: 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*150-194	3	Network Security			F	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
2	*150-153	3	Net Admin MS Server 2022	Coreq: 150-114	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	*150-145	3	IT Scripting			S	S
2	*154-114	3	Hardware/Software Support	Coreq: 150-152 OR 107-193		S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
3	*150-154	3	Network Admin MS Azure Administrator	Prereq: 150-119 OR 150-153		SU	SU
3	*150-124	3	Routing – CCNA 2	Prereq: 150-114		SU	SU
3	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU	SU

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Network Specialist (10-150-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	R-D	O
4	*150-150	3	Red Hat Enterprise Linux I	Prereq: 150-119 OR 150-153 Coreq: 801-136		F	F
4	*150-181	4	Cloud Technologies	Prereq: 150-124		F	F
4	*150-183	3	Virtual Technologies	Coreq: 150-150		F	F
4	801-198	3	Speech			F	F
5	*107-013	1	IT Job Skills	Prereq: 801-136		S	S
5	*150-155	3	Data Center Technician	Prereq: 150-152		S	S
5	*150-136	3	Server Technologies	Prereq: 107-193 OR 154-114; Coreq: 150-155		S	S
5	*150-149	3	Enterprise Networking CCNA3	Prereq: 150-124		S	S
5	*150-151	3	Red Hat Enterprise Linux II	Prereq: 150-150 OR 150-124		S	S

Minimum Program Total Credits Required: 63

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Network Specialist (10-150-2)

IT-Network Specialist is designed to prepare students for a professional career in the computer network field. The program takes the students from the beginning architectural design process through installation, configuration, administration, and tuning of microcomputer network environments. Additional topics incorporated into the program include cross-platform and enterprise network environments.

Program Learning Outcomes

Graduates will be able to:

1. Implement computer networks.
2. Implement client systems.
3. Implement server operating systems.
4. Implement network security components.
5. Develop technical documentation.
6. Troubleshoot network systems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 63 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

IT – Network Specialist (10-150-2)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/network-specialist. Please see your academic advisor for additional information.

R-D = Racine/days, O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	R-D	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*150-152	3	IT Tech Skills			F	F
1	*150-194	3	Network Security			F	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
2	*150-153	3	Net Admin MS Server 2022	Coreq: 150-114	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	*150-114	3	Network Concepts–CCNA 1	Coreq: 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S	S
2	*154-114	3	Hardware/Software Support	Coreq: 150-152 OR 107-193		S	S
3	*150-154	3	Network Admin MS Azure Administrator	Prereq: 150-119 OR 150-153		SU	SU
3	*150-124	3	Routing – CCNA 2	Prereq: 150-114		SU	SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU	SU
4	*150-150	3	Red Hat Enterprise Linux I	Prereq: 150-119 OR 150-153 Coreq: 801-136		F	F
4	*150-183	3	Virtual Technologies	Coreq: 150-150		F	F

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Network Specialist (10-150-2) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	R-D	O
5	*150-149	3	Enterprise Networking CCNA3	Prereq: 150-124		S	S
5	*150-151	3	Red Hat Enterprise Linux II	Prereq: 150-150		S	S
5	801-198	3	Speech			S	S
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU	SU
6	*150-145	3	IT Scripting			SU	SU
7	*150-181	4	Cloud Technologies	Prereq: 150-124		F	F
7	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
8	*107-013	1	IT Job Skills	Prereq: 801-136		S	S
8	*150-155	3	Data Center Technician	Prereq: 150-152		S	S
8	*150-136	3	Server Technologies	Prereq: 107-193 OR 154-114 Coreq: 150-155		S	S

Minimum Program Total Credits Required: 63

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Network Specialist (10-150-2)

IT-Network Specialist is designed to prepare students for a professional career in the computer network field. The program takes the students from the beginning architectural design process through installation, configuration, administration, and tuning of microcomputer network environments. Additional topics incorporated into the program include cross-platform and enterprise network environments.

Program Learning Outcomes

Graduates will be able to:

1. Implement computer networks.
2. Implement client systems.
3. Implement server operating systems.
4. Implement network security components.
5. Develop technical documentation.
6. Troubleshoot network systems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 63 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

IT – Software Developer (10-152-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/software-developer. Please see your academic advisor for additional information.

R-D= Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*107-011	3	IT in Business			F
1	*152-126	4	Intro to Prog. & Database Concepts		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*152-105	2	IBM Enterprise System Concepts	Coreq: 107-011	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134 **OR** 804-115	3 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*152-133	2	IBM Control Language	Prereq: 152-105		S
2	*152-141	3	Java Programming – IBM Systems	Prereq: 152-126; 152-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*152-145	3	Internet Programming	Prereq: 152-126		S
2	*152-151	3	Microcomputer Prog. Advanced	Prereq: 152-126		S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
3	801-197	3	Technical Reporting	Prereq: 801-136		SU

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Software Developer (10-152-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
4	*152-122	3	Computer Programming RPG/IV (ILE)	Prereq: 152-133; 152-126		F
4	*152-168	3	IBM and .NET Enterprise Programming	Prereq: 152-151		F
4	*152-093	3	IBM Advanced Java Programming	Prereq: 152-141; 152-145; 801-136; 804-134 OR 804-135 OR 804-115		F
4	*152-164	3	Mobile Device Programming	Prereq: 152-126		F
4	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		F
5	*152-125	3	Computer Program, RPG/IV (ILE) Adv.	Prereq: 152-122		S
5	*152-131	3	Systems Design / Development	Prereq: 152-122		S
5	*152-167	3	Zend (PHP) Application Programming	Prereq: 152-141		S
5	*152-158	3	DB2/UDB Programming	Prereq: 152-126; 152-105		S
5	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 63

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Software Developer (10-152-1)

IT-Software Developer covers the rapidly changing field of Information Technology with its multiple job opportunities; it may be completed in five semesters if taken full-time. The curriculum includes various types of programming, program analysis, and system software. Typical entry-level positions are entry-level programmer and computer operator.

Program Learning Outcomes

Graduates will be able to:

1 Design software systems.
2 Implement a team-based software development methodology.
3 Navigate in a software development environment.
4 Integrate data technologies.
5 Develop software applications.
6 Develop technical documentation.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1 Minimum 63 credits with a cumulative GPA of 2.0 or above.
2 *Minimum of 2.0 ("C") or above for these major courses.
3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

152-081 Programming in Python	809-196 Sociology, Intro to
801-198 Speech	809-172 Diversity Studies, Intro to
809-112 Principles of Sustainability	801-196 Oral/Interpersonal Communication

Notes

1 IT-Software Developer is a laptop program. Students will need a Windows-Based computer (with a hard drive) for use in the program. Please note MAC computers are not compatible with some of the required software.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

IT – Software Developer (10-152-1)

Associate of Applied Science

Effective 2026/2027

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O - Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*107-011	3	IT in Business			F
1	*152-126	4	Intro to Prog. & Database Concepts		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*152-105	2	IBM Enterprise System Concepts	Coreq: 107-011	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
2	*152-151	3	Microcomputer Prog. Advanced	Prereq: 152-126		S
2	804-134 **OR** 804-115	3 5	Mathematical Reasoning **OR** College Technical Math 1	Prereq: 854-760 Prereq: 834-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	*152-133	2	IBM Control Language	Prereq: 152-105		S
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
3	*152-141	3	Java Programming – IBM Systems	Prereq: 152-126; 152-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	*152-145	3	Internet Programming	Prereq: 152-126		SU

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Software Developer (10-152-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	O
4	*152-168	3	IBM and .NET Enterprise Programming	Prereq: 152-151		F
4	*152-093	3	IBM Advanced Java Programming	Prereq: 152-141; 152-145; 801-136; 804-134 OR 804-135 OR 804-115		F
4	*152-164	3	Mobile Device Programming	Prereq: 152-126		F
5	*152-158	3	DB2/UDB Programming	Prereq: 152-126; 152-105		S
5	*152-167	3	Zend (PHP) Application Programming	Prereq: 152-141		S
5	801-197	3	Technical Reporting	Prereq: 801-136		S
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
6	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		SU
7	*152-122	3	Computer Programming RPG/IV (ILE)	Prereq: 152-133; 152-126		F
7	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or s`uccessful remediation is required prior to enrollment. See an advisor for details.	F
8	*152-125	3	Computer Program, RPG/IV (ILE) Adv.	Prereq: 152-122		S
8	*152-131	3	Systems Design / Development	Prereq: 152-122		S

Minimum Program Total Credits Required: 63

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

IT – Software Developer (10-152-1)

IT-Software Developer covers the rapidly changing field of Information Technology with its multiple job opportunities; it may be completed in five semesters if taken full-time. The curriculum includes various types of programming, program analysis, and system software. Typical entry-level positions are entry-level programmer and computer operator.

Program Learning Outcomes

Graduates will be able to:

1. Design software systems.
2. Implement a team-based software development methodology.
3. Navigate in a software development environment.
4. Integrate data technologies.
5. Develop software applications.
6. Develop technical documentation.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 63 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

152-081 Programming in Python	809-196 Sociology, Intro to
801-198 Speech	809-172 Diversity Studies, Intro to
809-112 Principles of Sustainability	801-196 Oral/Interpersonal Communication

Notes

1. IT-Software Developer is a laptop program. Students will need a Windows-Based computer (with a hard drive) for use in the program. Please note MAC computers are not compatible with some of the required software.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Interior Design (10-304-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/interior-design. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*304-101	3	History of Furniture and Decorative Arts			F
1	*304-102	3	Principles of Interior Design			F
1	*304-122	3	Textiles			F
1	*304-128	3	Basic Architectural Drawing	Coreq: 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students are required to bring all drafting supplies for this course. These items are needed for the first 7 weeks of class, so please try to have them by the first day. If you are unable to obtain everything by that time, please prioritize purchasing the architectural scale, pencil and triangle for the first class session.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*304-129	3	Visual Communication for Interior Design	Prereq: 304-102; 304-128		S
2	*304-133	3	Sustainable Materials and Finishes			S
2	*304-137	3	Advanced Architectural Drawing	Prereq: 304-102; 304-128	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*304-156	3	Residential Design Studio 1	Prereq: 304-102; 304-128; Coreq: 804-134 OR 804-135		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*304-151	1	Center for Sustainable Living Practicum	Prereq: 304-133		SU
3	801-196	3	Oral/Interpersonal Communication			SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Interior Design (10-304-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
4	*304-116	3	Kitchen/Bathroom Plan	Prereq: 304-129; 304-137; 304-156; 801-136; 804-134 OR 804-135 Coreq: 304-138 OR 304-157		F
4	*304-132	3	Sales and Professional Practice of Interior Design	Prereq: 304-156		F
4	*304-154	2	Interior Elements of Building Const.	Prereq: 304-156		F
4	*304-157	2	Residential Design Studio 2	Prereq: 304-156		F
4	*304-158	1	Commercial Design Software	Coreq: 304-157		F
4	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*304-107	2	Internship for Interior Designers	Prereq: 304-156; 304-132; 304-116; 304-154; Coreq: 304-130	• Students must complete 72 hours of paid or unpaid internship work at an approved business. Transportation must be provided by the student.	S
5	*304-119	1	Portfolio Presentation	Prereq: Instructor Consent		S
5	*304-130	4	Commercial Design Studio	Prereq: 304-116; 304-132; 304-154; 304-156; Coreq: 304-107		S
5	*304-149	3	Advanced Kitchen and Bath	Prereq: 304-116		S
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Interior Design (10-304-1)

The *Interior Design* program emphasizes the design of functional, aesthetic, and technically proficient environments that meet the needs of people in spaces that are both safe and universally accessible. Green/sustainable practices are infused throughout the curriculum. Graduates are prepared with the necessary foundation skills in both manual and computer-aided graphics along with exposure to design studio processes and methodologies. Students are prepared to pursue careers in creative positions, as residential or commercial interior designers, kitchen and bath designers, designers in architectural firms, and more. Requires demonstration of the ability to create and execute a design portfolio, creative problem solving, and sustainability practices.

Program Learning Outcomes

Graduates will be able to:

1. Integrate Codes that impact the interior environment
2. Integrate industry guidelines that impact the interior environment
3. Apply interior design business practices
4. Apply the design process to interior design projects
5. Design within the parameters of the built environment
6. Apply the fundamentals of design

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. To be successful in this program, students must have access to a personal computer that meets the following minimum requirements: 17" monitor (or larger) for adequate visibility while working in design software; Reliable high-speed internet access for course materials, software updates, and remote access; Windows-based computer only — Program software is not compatible with MacOS or Chromebooks. A Windows laptop or desktop meeting these specifications is essential for completing course assignments both in and outside of class.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Protective and Human Services

Interior Design (10-304-1)

Associate of Applied Science
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/interior-design. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*304-128	3	Basic Architectural Drawing	Coreq: 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students are required to bring all drafting supplies for this course. These items are needed for the first 7 weeks of class, so please try to have them by the first day. If you are unable to obtain everything by that time, please prioritize purchasing the architectural scale, pencil and triangle for the first class session.	F
1	*304-102	3	Principles of Interior Design			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*304-129	3	Visual Communication for Interior Design	Prereq: 304-102; 304-128		S
2	*304-137	3	Advanced Architectural Drawing	Prereq: 304-102; 304-128	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	801-196	3	Oral/Interpersonal Communication			SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*304-122	3	Textiles			F
4	*304-101	3	History of Furniture and Decorative Arts			F
5	*304-133	3	Sustainable Materials and Finishes			S
5	*304-156	3	Residential Design Studio 1	Prereq: 304-102; 304-128 Coreq: 804-134 OR 804-135		S

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Interior Design (10-304-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
6	*304-151	1	Center for Sustainable Living Practicum	Prereq: 304-133		SU
6	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
6	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
7	*304-116	3	Kitchen/Bathroom Plan	Prereq: 304-129; 304-137; 304-156; 801-136; 804-134 OR 804-135; Coreq: 304-138 OR 304-157		F
7	*304-132	3	Sales and Professional Practice of Interior Design	Prereq: 304-156		F
7	*304-154	2	Interior Elements of Building Const.	Prereq: 304-156		F
7	*304-157	2	Residential Design Studio 2	Prereq: 304-156		F
7	*304-158	1	Commercial Design Software	Coreq: 304-157		F
8	*304-107	2	Internship for Interior Designers	Prereq: 304-156; 304-132; 304-116; 304-154; Coreq: 304-130	• Students must complete 72 hours of paid or unpaid internship work at an approved business. Transportation must be provided by the student.	S
8	*304-119	1	Portfolio Presentation	Prereq: Instructor Consent		S
8	*304-130	4	Commercial Design Studio	Prereq: 304-116; 304-132; 304-154; 304-156; Coreq: 304-107		S
8	*304-149	3	Advanced Kitchen and Bath	Prereq: 304-116		S

Minimum Program Total Credits Required: 65

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Interior Design (10-304-1)

The *Interior Design* program emphasizes the design of functional, aesthetic, and technically proficient environments that meet the needs of people in spaces that are both safe and universally accessible. Green/sustainable practices are infused throughout the curriculum. Graduates are prepared with the necessary foundation skills in both manual and computer-aided graphics along with exposure to design studio processes and methodologies. Students are prepared to pursue careers in creative positions, as residential or commercial interior designers, kitchen and bath designers, designers in architectural firms, and more. Requires demonstration of the ability to create and execute a design portfolio, creative problem solving, and sustainability practices.

Program Learning Outcomes

Graduates will be able to:

1. Integrate Codes that impact the interior environment
2. Integrate industry guidelines that impact the interior environment
3. Apply interior design business practices
4. Apply the design process to interior design projects
5. Design within the parameters of the built environment
6. Apply the fundamentals of design

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. To be successful in this program, students must have access to a personal computer that meets the following minimum requirements: 17" monitor (or larger) for adequate visibility while working in design software; Reliable high-speed internet access for course materials, software updates, and remote access; Windows-based computer only — Program software is not compatible with MacOS or Chromebooks. A Windows laptop or desktop meeting these specifications is essential for completing course assignments both in and outside of class.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Protective and Human Services

Landscape Horticulture (10-001-4)

Associate of Applied Science
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/landscape-horticulture.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*001-143	3	Herbaceous Plants	Coreq: 001-185		F
1	*001-146	1	Sustainable Landscape		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*001-147	1	Soils and Plant Nutrition		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*001-148	1	Plant Pests and Beneficials			F
1	*001-185	3	Intro to Horticulture		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*001-129	1	Pesticide Applicator Certification			S
2	*001-132	3	Landscape Plants Evergreen	Prereq: 001-185		S
2	*001-142	3	Vegetable Science			S
2	*001-151	3	Greenhouse Crops	Coreq: 804-134 OR 804-135; 801-136		S
2	461-120	3	Small Power Equipment			S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Landscape Horticulture (10-001-4) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	K-D
3	*001-111	3	Horticulture Practicum	Prereq: 001-147; 001-151		SU
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
4	*001-130	3	Landscape Plants Trees/Shrubs Deciduous	Prereq: 001-185		F
4	*001-136	3	Landscape Management			F
4	*001-140	3	Landscape Design/ Introduction	Prereq:001-143; 001-146 Coreq: 001-130		F
4	*001-160	3	Landscape Construction and Enhancements	Prereq: 001-111		F
5	*001-117	3	Landscape Design/Advanced	Prereq: 001-140		S
5	*001-122	3	Horticulture Business Operations	Prereq: 001-136; 001-160		S
5	*001-159	1	3D Landscape Rendering	Coreq: 001-117		S
5	*001-180	1	Horticulture Portfolio	Prereq: 001-130; 001-143; 001-147; 001-151		S
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
5	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Landscape Horticulture (10-001-4)

The Landscape Horticulture program trains students in sustainable landscape design and management. Plant identification, plant healthcare, hardscape development, irrigation installation and landscape estimating are important elements of this program. Plant health care explores pest and disease identification, prevention, and control through developing integrated pest- management systems. Learners will complete Pesticide Applicator Training. Technical skills such as proper planting, pruning, use of equipment and weed- control are covered. Sustainable landscape design and management is completed with hands-on, project-based learning all while considering environmental interactions and effects. Advanced skills in digital design, 3-D rendering, and presentation will also be taught. Campus and community projects provide opportunities for learners to engage in sustainable landscape design, installation, retrofits and management.

Program Learning Outcomes

Graduates will be able to:

1. Analyze growing media.
2. Diagnose plant health.
3. Communicate as a horticulture professional.
4. Apply design principles.
5. Provide horticulture maintenance.
6. Apply the principles of plant science.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Landscape Horticulture (10-001-4)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at ***https://www.gtc.edu/landscape-horticulture****.*

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)			F
1	*001-147	1	Soils and Plant Nutrition		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*001-148	1	Plant Pests and Beneficials			F
1	*001-185	3	Intro to Horticulture		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*001-151	3	Greenhouse Crops	Coreq: 804-134 OR 804-135; 801-136		S
2	461-120	3	Small Power Equipment			S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*001-143	3	Herbaceous Plants	Coreq: 001-185		SU
3	*001-146	1	Sustainable Landscape		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
4	*001-130	3	Landscape Plants Trees/Shrubs Deciduous	Prereq: 001-185		F
4	*001-140	3	Landscape Design/Introduction	Prereq: 001-143; 001-146 Coreq: 001-130		F

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Landscape Horticulture (10-001-4) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
5	*001-117	3	Landscape Design/Advanced	Prereq: 001-140		S
5	*001-129	1	Pesticide Applicator Certification			S
5	*001-132	3	Landscape Plants Evergreen	Prereq: 001-185		S
5	*001-159	1	3D Landscape Rendering	Coreq: 001-117		S
6	*001-111	3	Horticulture Practicum	Prereq: 001-147; 001-151		SU
6	*001-142	3	Vegetable Science			SU
7	*001-136	3	Landscape Management			F
7	*001-160	3	Landscape Construction and Enhancements	Prereq: 001-111		F
7	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
8	*001-122	3	Horticulture Business Operations	Prereq: 001-136; 001-160		S
8	*001-180	1	Horticulture Portfolio	Prereq: 001-130; 001-143; 001-147; 001- 151		S
8	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Landscape Horticulture (10-001-4)

The Landscape Horticulture program trains students in sustainable landscape design and management. Plant identification, plant healthcare, hardscape development, irrigation installation and landscape estimating are important elements of this program. Plant health care explores pest and disease identification, prevention, and control through developing integrated pest- management systems. Learners will complete Pesticide Applicator Training. Technical skills such as proper planting, pruning, use of equipment and weed- control are covered. Sustainable landscape design and management is completed with hands-on, project-based learning all while considering environmental interactions and effects. Advanced skills in digital design, 3-D rendering, and presentation will also be taught. Campus and community projects provide opportunities for learners to engage in sustainable landscape design, installation, retrofits and management.

Program Learning Outcomes

Graduates will be able to:

1. Analyze growing media.
2. Diagnose plant health.
3. Communicate as a horticulture professional.
4. Apply design principles.
5. Provide horticulture maintenance.
6. Apply the principles of plant science.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 61 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Legal Studies/Paralegal (10-110-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/legal-studies-paralegal. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*110-101	3	Intro to the Paralegal Profession		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*110-102	3	Civil Procedure			F
1	*110-103	3	Family Law			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*110-104	3	Law Office Management and Technology			S
2	*110-105	3	Legal Research		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*110-106	3	Civil Litigation Procedures	Prereq: 110-102		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Legal Studies/Paralegal (10-110-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	O
4	*110-107	3	Criminal Law and Procedure			F
4	*110-112	3	Immigration/International Law			F
4	*110-109	3	Estate Planning and Probate			F
4	*110-110 **OR** *110-111	3	Admin Law/Health Care Public Benefits **OR** Guardianships and Protective Services			F
5	*110-108	3	Legal Writing	Prereq: 110-105; 801-136; 804-134 OR 804-135		S
5	*110-113 **OR** *110-114	3	Employment Law **OR** Bankruptcy Law			S
5	*110-115	3	Ethics in the Legal Profession			S
5	*110-116	3	Trial Preparation/E-Discovery and Legal Tools			S
5	*110-117 **OR** *110-118	2	Paralegal Career Readiness **OR** Paralegal Internship	Coreq: 110-108		S

Minimum Program Total Credits Required: 60

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Legal Studies/Paralegal (10-110-1)

The Paralegal Program prepares students for responsible, entry-level paralegal positions. Working under the supervision of an attorney, paralegals serve as legal assistants who perform administrative and support tasks. Paralegals may work in the public sector or private law firms and may engage in a wide variety of legal duties. Graduates of this program will be qualified to perform specifically delegated substantive legal work for which a lawyer is responsible.

Program Learning Outcomes

Graduates will be able to:

1. Apply ethical principles in a legal environment.
2. Process legal documents.
3. Perform legal research.
4. Synthesize various sources into a supportable legal conclusion.
5. Demonstrate professionalism as a member of a legal team.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 60 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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Part-Time Pathway to Success
School of Protective and Human Services

Legal Studies/Paralegal (10-110-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/legal-studies-paralegal. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*110-101	3	Intro to the Paralegal Profession		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*110-102	3	Civil Procedure			F
1	*110-103	3	Family Law			F
2	*110-104	3	Law Office Management and Technology			S
2	*110-105	3	Legal Research		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
3	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*110-107	3	Criminal Law and Procedure			F
4	*110-109	3	Estate Planning and Probate			F

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Legal Studies/Paralegal (10-110-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
5	*110-106	3	Civil Litigation Procedures	Prereq: 110-102		S
5	*110-108	3	Legal Writing	Prereq: 110-105; 801-136; 804-134 OR 804-135		S
5	*110-113 **OR** *110-114	3	Employment Law **OR** Bankruptcy Law			S
6	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
7	*110-112	3	Immigration/International Law			F
7	*110-110 **OR** *110-111	3	Admin Law/Health Care Public Benefits **OR** Guardianships and Protective Services			F
8	*110-115	3	Ethics in the Legal Profession			S
8	*110-116	3	Trial Preparation/E-Discovery and Legal Tools			S
8	*110-117 **OR** *110-118	2	Paralegal Career Readiness **OR** Paralegal Internship	Coreq: 110-108		S

Minimum Program Total Credits Required: 60

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Legal Studies/Paralegal (10-110-1)

The Paralegal Program prepares students for responsible, entry-level paralegal positions. Working under the supervision of an attorney, paralegals serve as legal assistants who perform administrative and support tasks. Paralegals may work in the public sector or private law firms and may engage in a wide variety of legal duties. Graduates of this program will be qualified to perform specifically delegated substantive legal work for which a lawyer is responsible.

Program Learning Outcomes

Graduates will be able to:

1. Apply ethical principles in a legal environment.
2. Process legal documents.
3. Perform legal research.
4. Synthesize various sources into a supportable legal conclusion.
5. Demonstrate professionalism as a member of a legal team.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 60 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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Pathway to Success
https://www.gtc.edu/la-arts

Associate of Arts – Transfer Pathway (20-800-1)

Effective 2026/2027

Program Description

The Liberal Arts - Associate of Arts degree (AA) prepares students with the necessary academic and practical skills to complete a program of general education study and successfully transfer to a four-year college/university or to the workforce. The Associate of Arts requires coursework to prepare students to enter into many different areas of study, emphasizing Humanities & Fine Arts and Social & Behavioral Sciences.

Program Learning Outcomes

Graduates will be able to:

1 Interface with diverse audiences in the target language using effective speaking, writing, listening, and nonverbal skills.
2 Incorporate critical analysis, logic, and rational thinking to solve problems, develop well-reasoned arguments, and make decisions.
3 Integrate an awareness of the social, political, economic, interdisciplinary, and multicultural nature of knowledge in diverse cultures.
4 Develop self-awareness and self-management skills necessary to succeed in academic and professional endeavors.
5 Combine effective teamwork and collaborative methods to achieve shared goals.
6 Integrate knowledge of current technologies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

- Communication Competence
- Professionalism and Career Management
- Cultural Competence
- Critical Thinking and Problem Solving
- Teamwork and Collaboration
- Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

- Minimum 60 credits with a cumulative GPA of 2.0 or above.
- *Minimum of 2.0 ("C") or above for these major courses.
- Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Program Offerings

A student may start this degree program in the fall, spring, or summer semester. In order to graduate, students must complete the required number of credits in each stated category. Although there are a variety of course options which fulfill the credit requirements in each category, including daytime, evening, and online offerings, some of these course options are confined to specific campuses, times of day, or semesters. Travel between campuses may be required for select courses.

Notes

1 Students who wish to take a course at UW-Parkside and apply it towards their degree requirements need to apply to UW-Parkside as a non-degree seeking student using the UW System Application. UW-Parkside tuition and fee rates will apply.
2 Students planning to transfer to UW-Parkside upon completion of this degree should complete the Guaranteed Transfer form prior to completing 30 program credits at Gateway.
3 For guaranteed admission to UW-Parkside upon completion of this degree, students must complete the program with a minimum 2.0 cumulative GPA. Some academic programs may require a higher GPA for specific courses in the major. Students should consult with the UW-Parkside college advisor for their intended major.
4 Some courses offered in this program may be required to be completed online live via a video conferencing platform (set day and set time each week) or may be required to be completed online asynchronously (no set day or time each week) or completed hybrid (combination of in-person and online each week).
5 Students planning on transferring this degree to another institution are strongly encouraged to reach out to their transfer institution to confirm which Gateway Technical College courses will transfer most appropriately into their intended major of study.

Associate of Arts – Transfer Pathway (20-800-1)

Effective 2026/2027

Full-Time Pathway to Success

Term	Suggested Sequencing
1	Gateway to Success (G2S) – 1 credit
1	*801-136 English Composition – 3 credits
1	*Diversity – take 3 credits
1	*Humanities & Fine Arts – take 3 credits
1	*Social & Behavioral Science – take 3 credits
2	*Communications – take 3 credits
2	*804-250 Quantitative Reasoning – 4 credits
2	*Social & Behavioral Science – take 3 credits
2	*Elective – take 3-4 credits
3	*Global Studies & Languages – take 4 credits
3	*Speech – take 3 credits
3	*Elective – take 3-4 credits
4	*Social & Behavioral Science – take 3 credits
4	*Natural Sciences – take 4 credits
4	*Humanities & Fine Arts – take 3 credits
4	*Elective – take 3-4 credits
5	*Natural Sciences – take 2-4 credits
5	*Humanities & Fine Arts – take 3 credits
5	*Elective – take 3-4 credits
5	*Elective – take 3-4 credits

Part-Time Pathway to Success

Term	Suggested Sequencing
1	Gateway to Success (G2S) – 1 credit
1	*801-136 English Composition – 3 credits
1	*Diversity – take 3 credits
2	*Communications – take 3 credits
2	*804-250 Quantitative Reasoning – 4 credits
3	*Natural Sciences – take 4 credits
3	*Speech – take 3 credits
4	*Social & Behavioral Science – take 3 credits
4	*Elective- take 3-4 credits
5	*Natural Sciences – take 2-4 credits
5	*Social & Behavioral Science – take 3 credits
6	*Global Studies & Languages – take 4 credits
6	*Elective – take 3-4 credits
7	*Humanities & Fine Arts – take 3 credits
7	*Elective – take 3-4 credits
7	*Social & Behavioral Science – take 3 credits
8	*Humanities & Fine Arts – take 3 credits
8	*Humanities & Fine Arts – take 3 credits
9	*Elective – take 3-4 credits
9	*Elective – take 3-4 credits

Minimum Program Total Credits Required: 60

Completing Gateway to Success will put students on a path to achieve successful degree completion, on-time graduation, and enrich the college experience. Students are required to take this course in their first semester of enrollment. Please see an advisor for details.

(*) indicates students must achieve a minimum of 2.0 (“C”) or above for these major courses to meet graduation requirement

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Pathway to Success
https://www.gtc.edu/la-science

Associate of Science – Transfer Pathway (20-800-2)

Effective 2026/2027

Program Description

The Liberal Arts - Associate of Science degree (AS) prepares students with the necessary academic and practical skills to complete a program of general education study and successfully transfer to a four-year college/university or to the workforce. The Associate of Science requires coursework to prepare students to enter into many different areas of study, emphasizing math and sciences.

Program Learning Outcomes

Graduates will be able to:

1 Interface with diverse audiences in the target language using effective speaking, writing, listening, and nonverbal skills.
2 Incorporate critical analysis, logic, and rational thinking to solve problems, develop well-reasoned arguments, and make decisions.
3 Integrate an awareness of the social, political, economic, interdisciplinary, and multicultural nature of knowledge in diverse cultures.
4 Develop self-awareness and self-management skills necessary to succeed in academic and professional endeavors.
5 Combine effective teamwork and collaborative methods to achieve shared goals.
6 Integrate knowledge of current technologies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

- Communication Competence
- Professionalism and Career Management
- Cultural Competence
- Critical Thinking and Problem Solving
- Teamwork and Collaboration
- Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

- Minimum 60 credits with a cumulative GPA of 2.0 or above.
- *Minimum of 2.0 ("C") or above for these major courses.
- Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Program Offerings

A student may start this degree program in the fall, spring, or summer semester. In order to graduate, students must complete the required number of credits in each stated category. Although there are a variety of course options which fulfill the credit requirements in each category, including daytime, evening, and online offerings, some of these course options are confined to specific campuses, times of day, or semesters. Travel between campuses may be required for select courses.

Notes

1 Students who wish to take a course at UW-Parkside and apply it towards their degree requirements need to apply to UW-Parkside as a non-degree seeking student using the UW System Application. UW-Parkside tuition and fee rates will apply.
2 Students planning to transfer to UW-Parkside upon completion of this degree should complete the Guaranteed Transfer form prior to completing 30 program credits at Gateway.
3 For guaranteed admission to UW-Parkside upon completion of this degree, students must complete the program with a minimum 2.0 cumulative GPA. Some academic programs may require a higher GPA for specific courses in the major. Students should consult with the UW-Parkside college advisor for their intended major.
4 Some courses offered in this program may be required to be completed online live via a video conferencing platform (set day and set time each week) or may be required to be completed online asynchronously (no set day or time each week) or completed hybrid (combination of in-person and online each week).
5 Students planning on transferring this degree to another institution are strongly encouraged to reach out to their transfer institution to confirm which Gateway Technical College courses will transfer most appropriately into their intended major of study.

Associate of Science – Transfer Pathway (20-800-2) **Effective 2026/2027**

Full-Time Pathway to Success

Term	Suggested Sequencing
1	Gateway to Success (G2S) – 1 credit
1	*804-115 College Technical Math 1 – 5 credits
1	*Diversity – Take 3 credits
1	*801-136 English Composition – 3 credits
2	*Social & Behavioral Science – take 3 credits
2	*Communications – take 3 credits
2	*804-197 College Algebra & Trig w Apps – 5 credits
2	*Elective take 3-5 credits
3	*Speech – take 3 credits
3	*Global Studies & Languages – take 4 credits
3	*Math/Natural Sciences Core 1 (see link) 3-5 credits
4	*Math/Natural Sciences Core 2 (see link) 3-5 credits
4	*Math/Natural Sciences Core 3 (see link) 3-5 credits
4	*Math/Natural Sciences Core 4 (see link) 3-5 credits
5	*Math/Natural Sciences Core 5 (see link) 3-5 credits
5	*Humanities & Fine Arts – take 3 credits
5	*Elective take 3-5 credits

Part-Time Pathway to Success

Term	Suggested Sequencing
1	Gateway to Success (G2S) – 1 credit
1	*804-115 College Technical Math 1 – 5 credits
1	*Social & Behavioral Science – take 3 credits
2	*804-197 College Algebra & Trig w Apps – 5 credits
2	*Elective take 3-5 credits
2	*Math/Natural Sciences Core 1 (see link) 3-5 credits
3	*Math/Natural Sciences Core 2 (see link) 3-5 credits
3	*Math/Natural Sciences Core 3 (see link) 3-5 credits
4	*Math/Natural Sciences Core 4 (see link) 3-5 credits
4	*Global Studies & Languages – take 4 credits
5	*801-136 English Composition – 3 credits
5	*Diversity – Take 3 credits
6	*Math/Natural Sciences Core 5 (see link) 3-5 credits
6	*Elective take 3-5 credits
7	*Humanities & Fine Arts – take 3 credits
7	*Speech – take 3 credits
7	*Communications – take 3 credits

Minimum Program Total Credits Required: 60

Completing Gateway to Success will put students on a path to achieve successful degree completion, on-time graduation, and enrich the college experience. Students are required to take this course in their first semester of enrollment. Please see an advisor for details.

(*) indicates students must achieve a minimum of 2.0 (“C”) or above for these major courses to meet graduation requirements.

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Marketing (10-104-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/marketing. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*104-101	3	Marketing Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*102-137 **OR** *102-160	3	Introduction to Business **OR** Business Law			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
1	103-143	3	Computers for Professionals			F
2	*104-104	3	Selling Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*104-105	3	Promotion Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*104-194	3	International Marketing			S
2	804-134	3	Mathematical Reasoning	Prereq: 834-109	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
2	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Marketing (10-104-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
4	*104-133	3	Social Media Strategies			F
4	*104-109	3	Marketing/Sports & Event Intro			F
4	*104-173	3	Marketing Research			F
4	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
5	*104-137	3	Digital Marketing			S
5	101-112 **OR** 101-114	3 4	Accounting for Business **OR** Accounting Principles			S
5	*104-115	3	Marketing Capstone/Internship	Prereq: Instructor Consent		S
5	*104-172	3	Marketing Management	Prereq: 801-136; 804-134 OR 804-135		S
6	809-143	3	Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
6	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		SU

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Marketing (10-104-3)

Marketing is a two-year associate degree program if taken full-time. Project-based learning applications prepare graduates for work in marketing and sales positions with opportunities to advance throughout their career. Students will develop an understanding of marketing strategies for consumers and business customers. Marketing skills acquired are in the emerging areas of promotion, sales, digital, social media, data analysis, and business strategies along with the creation of a complete written marketing plan.

Program Learning Outcomes

Graduates will be able to:

1. Develop strategies to satisfy market needs.
2. Promote products to achieve a desired outcome.
3. Analyze market research to inform business decisions.
4. Apply selling strategies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

- Minimum 61 credits with a cumulative GPA of 2.0 or above.
- *Average of 2.0 ("C") or above for these major courses.
- Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

105-106 Business Communications	102-160 Business Law
201-101 Computer Illustration and Drawing Tech	104-127 Retailing

Notes

1. Some courses are standard length for a semester while others are offered in an accelerated format.
2. Students will complete 144 hours of paid or unpaid internship work at an approved business.

Accreditation Statement

Gateway Technical College's Marketing program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs [www.acbsp.org].

Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213
Phone: (913) 339-9356
www.acbsp.org

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Marketing (10-104-3)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/marketing. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	103-143	3	Computers for Professional			F
1	*104-101	3	Marketing Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*104-104	3	Selling Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*104-105	3	Promotion Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*102-137 **OR** *102-160	3	Introduction to Business **OR** Business Law			F
4	*104-133	3	Social Media Strategies			F

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Marketing (10-104-3) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
5	*104-137	3	Digital Marketing			S
5	*104-194	3	International Marketing			S
5	101-112 **OR** 101-114	3 4	Accounting for Business **OR** Accounting Principles			S
6	809-143	3	Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
6	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.		SU
7	*104-109	3	Marketing/Sports & Event Intro			F
7	*104-173	3	Marketing Research			F
7	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
8	*104-172	3	Marketing Management	Prereq: 801-136; 804-134 OR 804-135		S
8	*104-115	3	Marketing Capstone/Internship	Prereq: Instructor Consent		S

Minimum Program Total Credits Required: 61

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Marketing (10-104-3)

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Program Learning Outcomes

Graduates will be able to:

1. Develop strategies to satisfy market needs.
2. Promote products to achieve a desired outcome.
3. Analyze market research to inform business decisions.
4. Apply selling strategies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

- Minimum 61 credits with a cumulative GPA of 2.0 or above.
- *Average of 2.0 ("C") or above for these major courses.
- Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Suggested Electives

105-106 Business Communications	102-160 Business Law
201-101 Computer Illustration and Drawing Tech	104-127 Retailing

Notes

1. Some courses are standard length for a semester while others are offered in an accelerated format.
2. Students will complete 144 hours of paid or unpaid internship work at an approved business.

Accreditation Statement

Gateway Technical College's Marketing program is fully accredited and in good standing with the Accreditation Council for Business Schools and programs [www.acbsp.org].

Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213
Phone: (913) 339-9356
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Medical Laboratory Technician (10-513-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/medical-laboratory-technician. Please see your academic advisor for additional information.

R-D Racine/days, F=Fall, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*513-110	1	Basic Lab Skills	Prereq: Program Admission Coreq:513-111	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*513-111	2	Phlebotomy	Prereq: Program Admission Coreq: 513-110		F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
1	806-177	4	General Anatomy and Physiology	Prereq: 838-105 OR 851-757 OR 831-107	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Students must complete 288 hours of unpaid clinical experience at a clinical site. Students will be required to travel to the assigned clinical site for 7 weeks to complete rotations in each area of the clinical laboratory.	F
1	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*513-113	1	QA Lab Math		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	806-186	4	Introduction to Biochemistry	Prereq: 806-134 OR 806-177 OR 806-209 OR 806-212		S
2	806-197	4	Microbiology	Prereq: 806-105 OR 806-177 OR 806-196 OR 806-238	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	809-166	3	Ethics: Theory & Applications, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Medical Laboratory Technician (10-513-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D
3	*513-114	2	Urinalysis	Prereq: 806-177; Advisor Consent	• Students must have received a "B-" or better in 806-186 Introduction to Biochemistry before they can enroll in this course.	F
3	*513-115	2	Basic Immunology Concepts	Prereq: 806-177; Advisor Consent	• Students must have received a "B-" or better in 806-186 Introduction to Biochemistry before they can enroll in this course.	F
3	*513-116	4	Clinical Chemistry	Prereq: 806-186; Advisor Consent	• Students must have received a "B-" or better in 806-197 Microbiology before they can enroll in this course.	F
3	*513-120	3	Basic Hematology	Prereq: 806-177; Advisor Consent	• Students must have received a "B-" or better in 806-186 Introduction to Biochemistry before they can enroll in this course.	F
3	*513-133	4	Clinical Microbiology	Prereq: 806-197; Advisor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • In order to enroll in the clinical course, students must complete all other coursework, submit a completed health physical form and submit evidence of completion of courses 531-800 CPR-Healthcare Provider and 531-817 Heartsaver First Aid.	F
4	*513-109	4	Blood Bank	Prereq: 513-115		S
4	*513-121	1	Coagulation	Prereq: 513-120		S
4	*513-130	2	Advanced Hematology	Prereq: 513-120		S
4	*513-140	2	Advanced Microbiology	Prereq: 513-133		S
4	*513-170	2	Introduction to Molecular Diagnostics	Prereq: 513-116		S
4	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			S
5	*513-151	3	Clinical Experience	Prereq: 513-109; 513-114; 513-121; 513-130; 513-140; 513-170	• In order to enroll in the clinical course, students must complete all other coursework, submit a completed health physical form and submit evidence of completion of courses 531-800 CPR-Healthcare Provider and 531-817 Heartsaver First Aid.	SU
5	*513-152	4	Clinical Experience II	Prereq: 513-151	• Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager and/or Drug Testing. • Students must complete 288 hours of unpaid clinical experience at a clinical site. Students will be required to travel to the assigned clinical site for 7 weeks to complete rotations in each area of the clinical laboratory. • Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course.	SU

Minimum Program Total Credits Required: 62

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Medical Laboratory Technician (10-513-1)

At career entry, the medical laboratory technician/medical laboratory technician will be able to perform routine clinical laboratory tests (such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular, and other emerging diagnostics) as the primary analyst making specimen-oriented decisions on predetermined criteria, including a working knowledge of critical values. Communications skills will extend to frequent interactions with members of the healthcare team, external relations, customer service and patient education. The level of analysis ranges from waived and point of care testing to complex testing encompassing all major areas of the medical laboratory. The medical laboratory technician will have diverse functions in areas of preanalytical, analytical, post-analytical processes. The medical laboratory technician will have responsibilities for information processing, training, and quality control monitoring wherever medical laboratory testing is performed.

Program Learning Outcomes

Graduates will be able to:

1. Practice laboratory safety and regulatory compliance.
2. Collect and process biological specimens.
3. Monitor and evaluate quality control in the laboratory.
4. Apply modern clinical methodologies including problem solving and trouble shooting according to predetermined criteria.
5. Perform information processing in the clinical laboratory.
6. Model professional behaviors, ethics and appearance.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check.

Graduation Requirements

1. Minimum 62 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. A physical examination and immunization are required prior to admission to the first clinical course. Clinical sites may require proof of health insurance.
2. Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager and/or Drug Testing.
3. Must be completed to be eligible to take the MLT (ASCP) exam.
4. Course 806-151 Supplemental Chemistry for Healthcare is a recommended course to provide supplemental chemistry and math knowledge that is needed for this program.
5. Students must complete 288 hours of unpaid clinical experience at a clinical site. Students will be required to travel to the assigned clinical site for 7 weeks to complete rotations in each area of the clinical laboratory.
6. In order to enroll in the clinical course, students must complete all other coursework, submit a completed health physical form and submit evidence of completion of courses 531-800 CPR-Healthcare Provider and 531-817 Heartsaver First Aid.

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Full-Time Pathway to Success
School of Health
https://www.gtc.edu/nursing

Nursing – Associate Degree (10-543-1)

Associate of Applied Science
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.).

K-D = Kenosha, R-D = Racine/days, E-D = Elkhorn/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	K-D	E-D	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU	F/S/SU	F/S/SU
1	*806-177	4	General Anatomy and Physiology	Prereq: 838-105 OR 851-757 OR 831-107	• Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S/SU
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S/SU
1	809-188	3	Psychology, Developmental	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S/SU
1	801-198	3	Speech		• Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S/SU
2	*543-101	2	Nursing Fundamentals	Prereq: Program Admission; Advisor Consent; 806-177; Coreq: 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S	F/S/SU
2	*543-102	3	Nursing Skills	Prereq: Program Admission; Advisor Consent; 806-177 Coreq: 543-101	• Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S	F/S/SU
2	*543-103	2	Nursing Pharmacology	Prereq: Program Admission; Advisor Consent; 806-177 Coreq: 543-101; 543-102	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S	F/S/SU
2	*543-104	2	Nsg: Intro Clinical Practice	Prereq: Program Admission; Advisor Consent; 806-177; Coreq: 543-101; 543-102; 543-103	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S	F/S/SU
2	*806-179	4	Anatomy & Physiology, Adv.	Prereq: 806-177		F/S/SU	F/S	F/S/SU

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Nursing – Associate Degree (10-543-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	K-D	E-D	R-D
3	*543-105	3	Nursing Health Alterations	Prereq: Program Admission; 543-101; 543-102; 543-103; 543-104; 801-136 Coreq: 543-106; 543-107	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	S/F	F/S/SU
3	*543-106	3	Nursing Health Promotion	Prereq: Program Admission; 543-101; 543-102, 543-103; 543-104; 809-188; 801-136	• Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	S/F	F/S/SU
3	*543-107	2	Nsg: Clin Care Across Lifespan	Prereq: Program Admission; 543-101; 543-102; 543-103; 543-104; Coreq: 543-106	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	S/F	F/S/SU
3	*543-108	2	Nsg: Intro Clinical Care Mgt.	Prereq: Program Admission; 543-101; 543-102; 543-103; 543-104; Coreq: 543-105; 543-106; 543-107	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	S/F	F/S/SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU	S/F	F/S/SU
4	*543-109	3	Nursing Complx Health Alter I	Prereq: Program Admission; 543-105; 543-106; 543-107; 543-108; 806-179; Coreq: 806-197	• Students must have received a “B-“ or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S	F/S/SU
4	*543-110	2	Nursing Mental Health Comm	Prereq: Program Admission; 543-105; 543-106; 543-107; 543-108; 806-179; Coreq: 809-198; 543-109; 543-112	• Students must have received a “B-“ or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S	F/S/SU
4	*543-111	3	Nursing Intrmdt Clinical	Prereq: Program Admission; 543-105; 543-106; 543-107; 543-108; Coreq: 543-109; 543-110; 543-112	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Students must have received a “B-“ or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S	F/S/SU
4	*543-112	1	Nursing Advanced Skills	Prereq: Program Admission; 543-105; 543-106; 543-107; 543-108; 806-179 Coreq: 543-109	• Students must have received a “B-“ or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S	F/S/SU
4	*806-197	4	Microbiology	Prereq: 806-105 OR 806-177 OR 806-196 OR 806-238	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • It is preferred that students in this program complete 806-177 as the prereq for this course.	F/S/SU	F/S	F/S/SU

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Nursing – Associate Degree (10-543-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D	E-D	R-D
5	*543-113	3	Nursing Cmplx Health Alter II	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112; 806-197		F/S/SU	S/F	F/S/SU
5	*543-114	2	Nursing Management Concepts	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112		F/S/SU	S/F	F/S/SU
5	*543-115	3	Nursing Advanced Clinical	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112; Coreq: 543-113; 543-114	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.	F/S/SU	S/F	F/S/SU
5	*543-116	2	Nursing Clinical Trans.	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112; Coreq: 543-113; 543-114; 543-115	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.	F/S/SU	S/F	F/S/SU
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU	S/F	F/S/SU

Minimum Program Total Credits Required: 66

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Nursing – Associate Degree (10-543-1)

Nursing-Associate Degree program is the dynamic interpersonal goal-directed process that seeks to promote optimal health within the context of individuals, family, community and society. The concept of caring, which is central to nursing, is communicated through both attitude and action. Nursing uses the nursing process, a problem solving approach to provide holistic care to individuals, families, and groups within the health care system. Nurses assess health and make clinical decisions to provide safe and effective nursing care according to standards of practice within legal, ethical and regulatory frameworks. Nursing practice is based on its own body of knowledge. Through collaboration with other health care professionals, nursing is responsive to the needs of the community across the health-illness continuum. The program may be completed in two academic years of full-time study. Individuals who are Licensed Practical Nurses should contact Gateway for information regarding advanced standing opportunities.

Program Learning Outcomes

Graduates will be able to:

1. Integrate professional nursing identity reflecting integrity, responsibility and nursing standards.
2. Communicate comprehensive information using multiple sources in nursing practice.
3. Integrate theoretical knowledge to support decision making.
4. Integrate the nursing process into patient care across diverse populations.
5. Function as a healthcare team member to provide safe and effective care.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the program technical standards found at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check and official high school, GED or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 66 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

Gateway credits may transfer to colleges and universities offering advanced nursing ed. programs.
For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a high demand program that utilizes a priority placement process for enrollment in core 543 program courses.
2. Students must have completed 543-300 or equivalent of certified nursing assistant course prior to admission into program.
3. Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.
4. Please note that your program may require additional fee(s) for: Online e-modules / learning, program technology fees, Criminal Background Check, Medical Document Manager, and/or Drug Testing.
5. The core 543 nursing courses require students to have a laptop computer available for use in the classroom. The computer must meet minimum MS Windows laptop specifications - see your advisor for details.

Accreditation Statement

The Nursing program is fully accredited by the Accreditation Commission for Education in Nursing; 3390 Peachtree Rd NE Suite #1400, Atlanta, GA 30326. For more information, call (404) 975-5000.

Eligibility for Licensure Exam

Student must be a graduate of a state-approved school, be a U.S. citizen, or submit proof of intention to become a citizen or a permanent resident alien.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Part-Time Pathway to Success
School of Health
https://www.gtc.edu/nursing

Nursing – Associate Degree (10-543-1)

Associate of Applied Science
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.).

K-D = Kenosha, R-D = Racine/days, E-D = Elkhorn/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D	R-D	E-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU	F/S/SU	F/S/SU
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S/SU
1	806-177	4	General Anatomy and Physiology	Prereq: 838-105 OR 851-757 OR 831-107	• Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S/SU
2	*543-101	2	Nursing Fundamentals	Prereq: Program Admission; Advisor Consent; 806-177; Coreq: 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
2	*543-102	3	Nursing Skills	Prereq: Program Admission; Advisor Consent; 806-177 Coreq: 543-101	• Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
2	809-188	3	Psychology, Developmental	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
3	*543-103	2	Nursing Pharmacology	Prereq: Program Admission; Advisor Consent; 806-177 Coreq: 543-101; 543-102	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
3	*543-104	2	Nsg: Intro Clinical Practice	Prereq: Program Admission; Advisor Consent; 806-177; Coreq: 543-101; 543-102; 543-103	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Students must have received a "B-" or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
3	806-179	4	Anatomy & Physiology, Adv.	Prereq: 806-177		F/S/SU	F/S/SU	F/S

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Nursing – Associate Degree (10-543-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D	R-D	E-D
4	*543-106	3	Nursing Health Promotion	Prereq: Program Admission; 543-101; 543-102, 543-103; 543-104; 809-188; 801-136	• Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
4	*543-107	2	Nsg: Clin Care Across Lifespan	Prereq: Program Admission; 543-101; 543-102; 543-103; 543-104; Coreq: 543-106	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
5	*543-105	3	Nursing Health Alterations	Prereq: Program Admission; 543-101; 543-102; 543-103; 543-104; 801-136 Coreq: 543-106; 543-107	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
5	*543-108	2	Nsg: Intro Clinical Care Mgt.	Prereq: Program Admission; 543-101; 543-102; 543-103; 543-104 Coreq: 543-105; 543-106; 543-107	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
5	*806-197	4	Microbiology	Prereq: 806-105 OR 806-177 OR 806-196 OR 806-238	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • It is preferred that students in this program complete 806-177 as the prereq for this course.	F/S/SU	F/S/SU	F/S
6	*543-109	3	Nursing Complx Health Alter I	Prereq: Program Admission; 543-105; 543-106; 543-107; 543-108; 806-179; Coreq: 806-197	• Students must have received a "B-" or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S/SU	F/S
6	*543-112	1	Nursing Advanced Skills	Prereq Program Admission; 543-105; 543-106; 543- 107; 543-108; 806-179 Coreq: 543-109	• Students must have received a "B-" or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S/SU	F/S
6	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU	F/S/SU	F/S

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Nursing – Associate Degree (10-543-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D	R-D	E-D
7	*543-110	2	Nursing Mental Health Comm	Prereq: Program Admission; 543-105; 543-106; 543-107; 543-108; 806-179; Coreq: 809-198; 543-109; 543-112	• Students must have received a "B-" or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S/SU	F/S
7	*543-111	3	Nursing Intrmdt Clinical	Prereq: Program Admission; 543-105; 543-106; 543-107; 543-108; Coreq: 543-109; 543-110; 543-112	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing. • Students must have received a "B-" or better in 806-179 Anatomy and Physiology, Advanced before they can enroll in this course.	F/S/SU	F/S/SU	F/S
7	801-198	3	Speech		• Must be completed to be eligible to take the NCLEX-PN exam.	F/S/SU	F/S/SU	F/S
8	*543-113	3	Nursing Cmplx Health Alter II	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112; 806-197		F/S/SU	F/S/SU	F/S
8	*543-114	2	Nursing Management Concepts	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112		F/S/SU	F/S/SU	F/S
8	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU	F/S/SU	F/S
9	*543-115	3	Nursing Advanced Clinica	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112; Coreq: 543-113; 543-114	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.	F/S/SU	F/S/SU	F/S
9	*543-116	2	Nursing Clinical Trans.	Prereq: Program Admission; 543-109; 543-110; 543-111; 543-112; Coreq: 543-113; 543-114; 543-115	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.	F/S/SU	F/S/SU	F/S

Minimum Program Total Credits Required: 66

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Nursing – Associate Degree (10-543-1)

Nursing-Associate Degree program is the dynamic interpersonal goal-directed process that seeks to promote optimal health within the context of individuals, family, community and society. The concept of caring, which is central to nursing, is communicated through both attitude and action. Nursing uses the nursing process, a problem solving approach to provide holistic care to individuals, families, and groups within the health care system. Nurses assess health and make clinical decisions to provide safe and effective nursing care according to standards of practice within legal, ethical and regulatory frameworks. Nursing practice is based on its own body of knowledge. Through collaboration with other health care professionals, nursing is responsive to the needs of the community across the health-illness continuum. The program may be completed in two academic years of full-time study. Individuals who are Licensed Practical Nurses should contact Gateway for information regarding advanced standing opportunities.

Program Learning Outcomes

Graduates will be able to:

1. Integrate professional nursing identity reflecting integrity, responsibility and nursing standards.
2. Communicate comprehensive information using multiple sources in nursing practice.
3. Integrate theoretical knowledge to support decision making.
4. Integrate the nursing process into patient care across diverse populations.
5. Function as a healthcare team member to provide safe and effective care.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the program technical standards found at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check and official high school, GED or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 66 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

Gateway credits may transfer to colleges and universities offering advanced nursing ed. programs.
For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students must have completed 543-300 or equivalent of certified nursing assistant course prior to admission into program.
2. Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.
3. Please note that your program may require additional fee(s) for: Online e-modules / learning, program technology fees, Criminal Background Check, Medical Document Manager, and/or Drug Testing.
4. The core 543 nursing courses require students to have a laptop computer available for use in the classroom. The computer must meet minimum MS Windows laptop specifications - see your advisor for details.

Accreditation Statement

The Nursing program is fully accredited by the Accreditation Commission for Education in Nursing; 3390 Peachtree Rd NE Suite #1400, Atlanta, GA 30326. For more information, call (404) 975-5000.

Eligibility for Licensure Exam

Student must be a graduate of a state-approved school, be a U.S. citizen, or submit proof of intention to become a citizen or a permanent resident alien.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Full-Time Pathway to Success
School of Protective and Human Services

Paramedic Technician (10-531-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/paramedic-technician. Please see your academic advisor for additional information.

HE-D = HERO Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HE-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	SU+
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Paramedic students must attend an informational orientation with the program staff before the start of the program.	SU+
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
2	*531-911	2	EMS Fundamental	Prereq: 838-105 OR 851-757; Program Admission	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Prior to enrolling in paramedic level courses, a student must satisfactorily complete an EMS specific pre-admission screening which includes both written and practical components at the Emergency Medical Technician	F
2	*531-912	4	Paramedic Medical Principles	Coreq: 531-911	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
2	*531-913	3	Adv. Patient Asses. Principles	Coreq: 531-911		F
2	*531-914	3	Adv. Pre-Hospital Pharmacology	Coreq: 531-911		F
2	*531-915	2	Paramedic Respiratory Mgt.	Coreq: 531-914		F
2	*531-926	1	Paramedic Hospital Field	Coreq: 531-912	• Drug testing and immunizations are required prior to admission to the first clinical course (531-926 or 531-927). • Applicants of this program are subject to a review of their criminal backgrounds as part of the training center training permit process. Positive background checks may negatively impact your ability to pursue this career at Gateway Technical College.	F
2	*531-928	2	Paramedic HPS Lab I	Coreq: 531-912		F
2	*531-955	2	Paramedic Cardiology 1	Coreq: 531-915	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.
(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Paramedic Technician (10-531-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HE-D
3	*531-956	2	Paramedic Cardiology 2	Prereq: 531-955		S
3	*531-918	1	Adv. Emergency Resuscitation	Coreq: 531-955		S
3	*531-919	4	Paramedic Medical Emergencies	Coreq: 531-955		S
3	*531-920	3	Paramedic Trauma	Coreq: 531-955		S
3	*531-921	3	Special Patient Populations	Coreq: 531-955		S
3	*531-922	1	EMS Operations	Coreq: 531-955		S
3	*531-923	1	Paramedic Capstone	Coreq: 531-955		S
3	*531-927	2	Paramedic Hospital Field II	Coreq: 531-955	• Drug testing and immunizations are required prior to admission to the first clinical course (531-926 or 531-927). • Applicants of this program are subject to a review of their criminal backgrounds as part of the training center training permit process. Positive background checks may negatively impact your ability to pursue this career at Gateway Technical College.	S
3	*531-929	2	Paramedic HPS Lab II	Prereq: 531-928 Coreq: 531-955		S
4	809-166 **OR** 809-172	3	Ethics: Theory & Applications, Intro to **OR** Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
4	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU+
4	806-177	4	General Anatomy and Physiology	Prereq: 838-105 OR 851-757 OR 831-107		SU+
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
5	806-179	4	Anatomy & Physiology, Advanced	Prereq: 806-177		F+
5	809-188 **OR** 809-159	3	Psychology, Developmental **OR** Psychology, Abnormal	Prereq: 838-105 OR 851-757 Prereq: 809-198	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+

Minimum Program Total Credits Required: 65

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Paramedic Technician (10-531-1)

Paramedic Technician requires students to be licensed in Wisconsin at the Emergency Medical Technician (EMT), Advanced EMT (EMT Intermediate Technician), or EMT Intermediate level and be current in Healthcare Provider CPR. Paramedics can perform more acute care and administer advanced drug therapies. They can also perform surgical procedures to open airways and provide resuscitative drugs. Paramedics have an increased knowledge of lifesaving skills as well as advanced emergency assessment expertise. At the end of the program, students will take a final Gateway Technical College written and practical exam, and after successful completion students will be eligible to test and credential through the National Registry of Emergency Medical Technicians®. The program includes approximately 650 hours of classroom lecture and skills lab, and approximately 500 hours of supervised hospital clinical and field time. Satisfactory completion of clinical/field time is competency based so actual number of hours may vary from student to student. Graduates of this program can expect to find employment with private ambulance companies, fire departments, or hospital emergency rooms. Students finishing the first two semesters of the program (the 531 courses) are eligible to receive the Paramedic Technical Diploma (31-531-1). All courses in the EMT-Paramedic diploma program can be applied to the Paramedic Technician associate degree.

Program Learning Outcomes

Graduates will be able to:

1 Prepare for incident response and EMS operations.
2 Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
3 Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters.
4 Communicate effectively with others.
5 Demonstrate professional behavior.
6 Meet state and national competencies listed for paramedic
7 credentialing.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments. 3. Students must have current CPR certification.
3 Students must have current Wisconsin EMS licensure.
4 Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1 Minimum 65 credits with a cumulative GPA of 2.0 or above.
2 *Minimum of 2.0 ("C") or above for these major courses.
3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1 Prior to enrolling in paramedic level courses, a student must satisfactorily complete an EMS specific pre-admission screening which includes both written and practical components at the Emergency Medical Technician level (EMT) and attend an informational orientation with the program staff.
2 Applicants of this program are subject to a review of their criminal backgrounds as part of the training center training permit process. Positive background checks may negatively impact your ability to pursue this career at Gateway Technical College.
3 Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
4 Paramedic students must attend an informational orientation with the program staff before the start of the program.
5 It is recommended that applicants re-enroll in the Paramedic program within one year of exiting due to possible curriculum changes and degradation of skill competency/knowledge.
6 COVID-19 policy at field and clinical sites are subject to change at the discretion of the sites themselves. Paramedic program students must abide by field and clinical site COVID-19 policies while participating in clinical field time at these sites.

Accreditation Statement

The EMT Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 N., Suite 158
Clearwater, FL 33763
727-210-2350
www.caahep.org

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Physical Therapist Assistant (10-524-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/physical-therapist-assistant. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*806-177	4	General Anatomy & Physiology	Prereq: 838-105 OR 851-757 OR 831-107	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • This course is an academic preparedness requirement that must be completed prior to core program coursework.	F/S/SU
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • This course is an academic preparedness requirement that must be completed prior to core program coursework.	F/S/SU
1	801-196	3	Oral/Interpersonal Communication		• Students may take this course while on the waiting list for core program courses.	F/S/SU
1	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Students may take this course while on the waiting list for core program courses.	F/S/SU
2	*524-156	4	PTA Applied Kinesiology 1	Prereq: Instructor Consent; 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
2	*524-139	4	PTA Patient Interventions	Prereq: Instructor Consent		F
2	*524-140	2	PTA Professional Issues 1	Prereq: Instructor Consent		F
2	*524-143	4	PTA Biophysical Agents	Prereq: Instructor Consent Coreq: 524-139		F

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Physical Therapist Assistant (10-524-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
3	*524-157	3	PTA Applied Kinesiology 2	Prereq: 524-156		S
3	*524-147	2	PTA Clinical Practice 1	Coreq: 524-143; 524-157	• The grading system for this course will be pass/fail.	S
3	*524-142	3	PTA Therapeutic Exerc.	Prereq: 806-177; Coreq: 524-156		S
3	*524-145	4	PTA Principles of Musculoskeletal Rehab.	Prereq: 524-139; Coreq: 524-142; 524-157		S
4	*524-144	4	PTA Princ of Neuro Rehab.	Prereq: 524-139; 524-142; 524-157		F
4	*524-146	3	PTA Cardio & Integ Mgmt	Prereq: 524-139; 524-142; 524-157		F
4	*524-148	3	PTA Clinical Practice 2	Prereq: 524-147	• The grading system for this course will be pass/fail.	F
4	809-188	3	Psychology, Developmental	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Students may take this course while on the waiting list for core program courses.	F
5	*524-149	2	PTA Rehabilitation Across the Lifespan	Prereq: 524-144; 524-145; 524-148 Coreq: 524-146		S
5	*524-150	2	PTA Professional Issues 2	Prereq: 524-140; Coreq: 524-148		S
5	*524-151	5	PTA Clinical Practice 3	Prereq: 524-144; 524-145; 524-146; 524-148	• The grading system for this course will be pass/fail.	S
5	809-172	3	Diversity Studies, Introduction to	Prereq: 838-105 OR 851-757 OR 831-107	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Students may take this course while on the waiting list for core program courses.	S

Minimum Program Total Credits Required: 65

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Physical Therapist Assistant (10-524-1)

Physical Therapist Assistant is a health profession with the primary purpose of promoting optimal human health and function through the application of scientific principles to prevent, identify, assess, correct, or alleviate acute or prolonged movement dysfunction. The physical therapist assistant (PTA) is a technical health care worker who carries out many patient treatments under the supervision of a physical therapist. PTAs find employment in clinics, hospitals, nursing homes, rehabilitation centers, home care agencies, schools, private health and fitness centers, and other settings.

Program Learning Outcomes

Graduates will be able to:

1. Function under the direction and supervision of a physical therapist in a safe, legal, ethical manner consistent with professional standards and values to ensure the safety of patients, self, and others.
2. Demonstrate clear and collaborative communication with patients, families, and health care team.
3. Exhibit behaviors and conduct that optimize inclusive, equitable patient care and patient care environments in alignment with physical therapy practice standards.
4. Produce documentation to support the delivery of physical therapy services.
5. Demonstrate critical decision making to implement and modify treatment within a plan of care under the direction and supervision of a physical therapist.
6. Perform data collection essential for carrying out the plan of care under the direction and supervision of the physical therapist.
7. Perform technically competent, evidence-informed physical therapy interventions under the direction and supervision of the physical therapist.
8. Educate patients, families, and other health providers incorporating cultural humility and social determinants of health.
9. Integrate components of operational and fiscal practices of physical therapy service in a variety of settings.
10. Implement a self-directed plan for career development, credentialing, service and leadership skills, and lifelong learning in an ever-changing health care environment.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check.

Graduation Requirements

1. Minimum 65 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This program may require additional fee(s) for: Criminal background Check, Medical Document Manager, and/or Drug Testing.
2. CPR certification must be obtained and maintained. See advisor for specific requirements.
3. The grading system for the following courses will be pass/fail: 524-147 PTA Clinical Practice 1, 524-148 PTA Clinical Practice 2, and 524-151 PTA Clinical Practice 3.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Respiratory Therapy (10-515-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at gtc.edu/respiratory-therapy. Please see your academic advisor for additional information.

K-D = Kenosha, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq- with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	SU
1	*806-177	4	General Anatomy and Physiology	Prereq: 838-105 OR 851-757 OR 831-107		SU
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
1	809-188	3	Psychology, Developmental	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
1	801-198	3	Speech			SU
2	*806-179	4	Anatomy & Physiology, Adv.	Prereq: 806-177		F
2	*515-111	3	Respiratory Survey	Coreq: 515-171; Program Admission; Advisor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
2	*515-174	3	Respiratory/Cardiac Physiology	Coreq: 515-111; 515-171		F
2	*515-171	3	Respiratory Therapeutics 1	Prereq: 806-177; Program Admission Coreq: 515-111; Advisor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
3	*515-172	3	Respiratory Therapeutics 2	Prereq: 515-171 Coreq: 515-112; 515-173; 515-174		S
3	*515-173	3	Respiratory Pharmacology	Prereq: 806-177; 515-111; 515-171 Coreq: 515-172		S
3	*515-112	2	Respiratory Airway Management	Prereq: 515-174; Program Admission		S
3	*515-175	2	Respiratory Clinical 1	Prereq: 515-111; 515-171 Coreq: 515-172		S

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Respiratory Therapy (10-515-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq- with)	Notes	K-D
4	*515-113	3	Respiratory Life Support	Prereq: 515-112; 515-172; 515-174; 515-175 Coreq: 515-176; 515-178; 515-179		SU
4	*515-176	3	Respiratory Disease	Prereq: 515-111; 515-112; 515-173;174; 806-177 Coreq: 515-113; 515-178; 515-179		SU
4	*515-178	3	Respiratory Clinical 2	Prereq: 515-175 Coreq: 515-113; 515-176; 515-179		SU
4	*515-179	3	Respiratory Clinical 3	Coreq: 515-113; 515-176; 515-178		SU
5	*515-180	2	Respiratory Neo/Peds Care	Prereq: 515-113 Coreq: 515-181; 515-182; 515-183		F
5	*515-181	3	Respiratory/Cardio Diagnostic	Prereq: 515-113; 515-173; 515-176 Coreq: 515-180; 515-182; 515-183		F
5	*515-182	3	Respiratory Clinical 4	Prereq: 515-113; 515-179 Coreq: 515-180; 515-181; 515-183		F
5	*515-183	3	Respiratory Clinical 5	Coreq: 515-180; 515-181; 515-182		F
5	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F

Minimum Program Total Credits Required: 63

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Respiratory Therapy (10-515-1)

Respiratory therapists see patients with diseases, infections and viruses of the cardiopulmonary system, such as lung cancer, asthma, emphysema, bronchitis and pneumonia. Common respiratory care includes managing mechanical ventilation life support systems, assessing the cardiopulmonary status of patients, drawing blood samples, performing blood gas analysis and pulmonary function testing, initiating ordered respiratory care, evaluating and monitoring patients' responses to such care and modifying the prescribed respiratory therapy and cardiopulmonary procedures. Respiratory therapists also provide patient, family and community education, and participate in life support activities as required.

Program Learning Outcomes

Graduates will be able to:

1. Apply respiratory therapy concepts to patient care situations.
2. Demonstrate technical proficiency required to fulfill the role of a Respiratory Therapist.
3. Practice respiratory therapy according to established professional and ethical standards.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected to become core active based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a background disclosure form, criminal background check, and official high school, GED or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 63 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. All courses must be completed to be eligible to take the RRT exam.
4. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. A physical examination and immunization are required prior to admission to the first clinical course. Clinical sites may require proof of health insurance.
2. Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
3. The core 515 courses require students to have a laptop computer available for use in the classroom. The computer must meet minimum MS Windows laptop specifications - see your advisor for details.

Eligibility for Licensure Exam

Student must be a graduate of a state-approved school, be a U.S. citizen, or submit proof of intention to become a citizen or a permanent resident alien.

Accreditation Statement

Gateway Technical College is currently in the process of seeking CoARC accreditation for a respiratory care program. However, Gateway Technical College can provide no assurance that accreditation will be granted by the CoARC.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Supply Chain Management (10-182-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/supply-chain-management. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
1	*102-137	3	Intro to Business			F
1	*182-101	3	Supply Chain Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*182-102	3	Introduction to Logistics			F
2	101-114	4	Principles of Accounting			S
2	*182-103	3	Global Supply Chain Management	Prereq: 182-101		S
2	*182-115	3	Manufacturing & Robotics, Intro to			S
2	*182-182	3	Transportation Management			S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communications **OR** Speech			SU
3	809-198	3	Psychology, Introduction to		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Supply Chain Management (10-182-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
4	*182-106	3	Enterprise Resource Planning and Control	Prereq: 182-101; 804-134 OR 804-135; 801-136		F
4	*182-183	3	Distribution Management			F
4	*196-151	3	Operations Management			F
4	*196-133	3	Negotiations			F
5	102-160	3	Business Law			S
5	*182-107 **OR** *196-188	3	Supply Chain Internship **OR** Project Management	Prereq: Instructor Consent		S
5	*182-108	3	Purchasing			S
5	*196-190	3	Leadership Development		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
5	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 62

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Supply Chain Management (10-182-1)

Supply Chain Management is the efficient movement of materials and products including all logistical activities involved in the flow of goods - from point of origin to point of consumption. This program focuses on operations, transportation, procurement and distribution of materials and products. Workers in this field are prepared to analyze and improve processes within their area. Skills in planning, decision making, continuous improvement, problem solving, and leadership will be learned. Possible careers in Supply Chain include manager, claims analyst, customer service representative, dispatcher, inventory analyst, inventory control specialist, logistics technician, materials planner, master production scheduler, purchasing assistant, shipping and receiving specialist, transportation planner/coordinator, warehouse specialist and international logistics technician.

Program Learning Outcomes

Graduates will be able to:

1. Implement Supply Management practices in a global environment.
2. Demonstrate operations management techniques across product and service industries.
3. Analyze logistic interfaces and activities in a supply chain.
4. Evaluate demand management techniques and customer service policies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 62 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Supply Chain Management (10-182-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/supply-chain-management. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*182-101	3	Supply Chain Management		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*182-102	3	Introduction to Logistics			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*102-137	3	Intro to Business			S
2	*182-182	3	Transportation Management			S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communications **OR** Speech			SU
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
4	*182-106	3	Enterprise Resource Planning and Control	Prereq: 182-101; 804-134 OR 804-135; 801-136		F
4	*182-183	3	Distribution Management			F
4	*196-151	3	Operations Management			F

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Supply Chain Management (10-182-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
5	101-114	4	Principles of Accounting			S
5	*182-103	3	Global Supply Chain Management	Prereq: 182-101		S
5	*182-115	3	Manufacturing & Robotics, Intro to			S
6	809-195 **OR** 809-143	3	Economics **OR** Microeconomics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
6	*196-190	3	Leadership Development		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
7	102-160	3	Business Law			F
7	*196-133	3	Negotiations			F
8	*182-107 **OR** *196-188	3	Supply Chain Internship **OR** Project Management	Prereq: Instructor Consent		S
8	*182-108	3	Purchasing			S

Minimum Program Total Credits Required: 62

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Supply Chain Management (10-182-1)

Supply Chain Management is the efficient movement of materials and products including all logistical activities involved in the flow of goods - from point of origin to point of consumption. This program focuses on operations, transportation, procurement and distribution of materials and products. Workers in this field are prepared to analyze and improve processes within their area. Skills in planning, decision making, continuous improvement, problem solving, and leadership will be learned. Possible careers in Supply Chain include manager, claims analyst, customer service representative, dispatcher, inventory analyst, inventory control specialist, logistics technician, materials planner, master production scheduler, purchasing assistant, shipping and receiving specialist, transportation planner/coordinator, warehouse specialist and international logistics technician.

Program Learning Outcomes

Graduates will be able to:

1. Implement Supply Management practices in a global environment.
2. Demonstrate operations management techniques across product and service industries.
3. Analyze logistic interfaces and activities in a supply chain.
4. Evaluate demand management techniques and customer service policies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 62 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Surgical Technology (10-512-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/surgical-technology. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	SU
1	*806-177	4	General Anatomy & Physiology	Prereq: 838-105 OR 851-757 OR 831-107	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
1	801-196	3	Oral/Interpersonal Communication			SU
1	*501-101	3	Medical Terminology	Prereq: 838-105	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU
2	*512-125	4	Intro to Surgical Technology	Prereq: Advisor Consent; 806-177; Coreq: 501-101	• Faculty have identified this course as providing a strong foundation for success throughout the program. • It is required that students in this program complete 806-177 as the prereq for this course.	F
2	*512-126	4	Surgical Tech Fundamentals 1	Prereq: Advisor Consent; 806-177; 512-125 Coreq: 501-101		F
2	*512-127	2	Exploring Surgical Issues	Prereq: Advisor Consent; Coreq: 512-125		F
2	*806-197	4	Microbiology	Prereq: 806-105 OR 806-177 OR 806-196 OR 806-238	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • The prereq for this course must have been completed with a minimum grade of “C”. • It is required that students in this program complete 806-177 as the prereq for this course.	F
3	*512-128	4	Surgical Tech Fundamentals 2	Prereq: 512-126; 512-125; 512-127; 501-101; Coreq: 512-129; 512-130	• Faculty have identified this course as providing a strong foundation for success throughout the program.	S
3	*512-129	2	Surgical Pharmacology	Prereq: 512-125; 512-126		S
3	*512-130	2	Surgical Skills Applications 1	Prereq: Advisor Consent; 512-125; 512-126; 512-127; Coreq: 512-128; 512-129	• Faculty have identified this course as providing a strong foundation for success throughout the program. • Students will be required to remain CPR certified BLS for the HealthCare Provider with American Heart Association during the entire duration of the program. • Clinical sites may require proof of insurance. • Students must complete a total of 120 surgical procedures (80 that are first scrub and 40 second scrub) during the clinical rotation per ARC-STSA requirements. • Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing.	S
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Surgical Technology (10-512-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
4	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing.	SU
4	809-196	3	Sociology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing.	SU
5	*512-132	3	Surgical Technology Clinical 1	Prereq: Advisor Consent; 512-128, 512-129; 512-130; Coreq: 512-131	• Students will be required to remain CPR certified BLS for the HealthCare Provider with American Heart Association during the entire duration of the program. • Clinical sites may require proof of insurance. • Students must complete a total of 120 surgical procedures (80 that are first scrub and 40 second scrub) during the clinical rotation per ARC-STSA requirements. • Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing.	F
5	*512-131	4	Surgical Interventions 1	Prereq: 512-128; 512-130; 801-136		F
5	*512-133	3	Surgical Technology Clinical 2	Prereq: Advisor Consent; 512-129; 512-130; 512-132; Coreq: 512-131	• Students will be required to remain CPR certified BLS for the HealthCare Provider with American Heart Association during the entire duration of the program. • Clinical sites may require proof of insurance. • Students must complete a total of 120 surgical procedures (80 that are first scrub and 40 second scrub) during the clinical rotation per ARC-STSA requirements. • Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing. • This course is graded on a Pass/Fail basis	F
6	*512-142	4	Surgical Interventions II	Prereq: 512-131; 512-133 Coreq: 512-135; 512-136	• Students must complete the Certified Surgical Technologist exam upon completion of the program which includes an extra fee that the student is required to pay in addition to their normal tuition fees. This exam is an accreditation requirement per ARC-STSA and most employers located in this area require their surgical technology staff to have this certification within a year.	S
6	*512-135	3	Surgical Technology Clinical 3	Prereq: Advisor Consent; 512-131; 512-133; Coreq: 512-142	• Students will be required to remain CPR certified BLS for the HealthCare Provider with American Heart Association during the entire duration of the program. • Clinical sites may require proof of insurance. • Students must complete a total of 120 surgical procedures (80 that are first scrub and 40 second scrub) during the clinical rotation per ARC-STSA requirements. • Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing. • This course is graded on a Pass/Fail basis	S
6	*512-136	3	Surgical Technology Clinical 4	Prereq: Advisor Consent; 512-135 Coreq: 512-142	• Students will be required to remain CPR certified BLS for the HealthCare Provider with American Heart Association during the entire duration of the program. • Clinical sites may require proof of insurance. • Students must complete a total of 120 surgical procedures (80 that are first scrub and 40 second scrub) during the clinical rotation per ARC-STSA requirements. • Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing. • This course is graded on a Pass/Fail basis	S

Minimum Program Total Credits Required: 62

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Surgical Technology (10-512-1)

Surgical Technology graduates are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings. The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works to ensure that the operating room environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety. A surgical technologist possesses expertise in the theory and application of sterile and aseptic technique and combines the knowledge of human anatomy, surgical procedures, and implementation tools and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

Program Learning Outcomes

Graduates will be able to:

1. Apply healthcare and technological science principles to the perioperative environment.
2. Maintain principles of sterile technique in the surgical environment.
3. Provide a safe, efficient, and supportive environment for the patient.
4. Prepare the patient, operating room, and surgical team for the preoperative phase.
5. Perform intraoperative case management in the scrub role.
6. Perform postoperative case management.
7. Function as an ethical, legal, and professional member of the healthcare team as determined by governing bodies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the program technical standards found at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check. Enrollment in core program courses requires students to be at least 18 years of age at the start of the term.

Graduation Requirements

1. Minimum 62 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

Gateway credits may transfer to colleges and universities offering advanced nursing ed. programs. For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students will be required to remain CPR certified BLS for the HealthCare Provider with American Heart Association during the entire duration of the program.
2. Clinical sites may require proof of insurance.
3. There is a daily exposure to latex products in this program. Those with latex sensitivity may find exposure to latex impossible to avoid in this environment.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses.
5. Students will be required to provide annual tuberculosis test results, proof of immunizations, and a 10 panel drug screen before clinical placements can occur.
6. Students must complete a total of 120 surgical procedures (80 that are first scrub and 40 second scrub) during the clinical rotation per ARC-STSA requirements.
7. Please note that your program requires additional fee(s) for: Criminal Background Check, Medical Document Manager, and Drug Testing.
8. Students must complete the Certified Surgical Technologist exam upon completion of the program which includes an extra fee that the student is required to pay in addition to their normal tuition fees. This exam is an accreditation requirement per ARC-STSA and most employers located in this area require their surgical technology staff to have this certification within a year.
9. The core 512 courses require students to have a laptop computer available for use in the classroom. The computer must meet minimum MS Windows laptop specifications - see your advisor for details.

Accreditation Statement

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
https://www.caahep.org/

Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA)
https://arcstsa.org/

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Pathway to Success
https://www.gtc.edu/technical-studies-journeyworker

Technical Studies – Journeyworker (10-499-5)

Associate of Applied Science

Effective 2026/2027

Technical Studies - Journeyworker (10-499-5)

In response to requests for academic recognition of registered apprenticeship training in the state of Wisconsin, the WTCS provides a TECHNICAL STUDIES – JOURNEYWORKER ASSOCIATE IN APPLIED SCIENCE DEGREE. This degree recognizes the goals, general principles and procedures of the WTCS Credit for Prior Learning Policy (WTCS #323, revised July 2005). The Technical Studies Journeyworker AAS degree is designed to support lifelong learning and accelerate the achievement of individual career goals. Transferability of the Technical Studies portion of the AAS degree to four year institutions will be based on the accepting institution's policies.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Program Requirements

1. For admission, students must meet the following requirements: submit an application and $30 fee; complete reading, writing, and math placement assessments; and submit official high school, GED, or HSED transcript.
2. Students must possess a Wisconsin Apprenticeship Completion Certificate issued by the Department of Workforce Development-Bureau of Apprenticeship Standards registered program which includes a minimum of 400 hours of prescribed apprentice related instruction in the Wisconsin Technical College System.
3. Complete all prescribed WTCS apprentice related technical instruction. Possession of the DWD-BAS Wisconsin Apprenticeship Completion Certificate AND successful completion of all prescribed coursework fulfills the Technical Studies requirement of the Technical Studies-Journeyworker Associate of Applied Science degree.

Graduation Requirements

1. 60 Credit Hours
2. 39 credits Technical Studies courses (awarded as advanced standing)
3. 21 credits General Studies required from the following:
    a. 6 credits Communications
    b. 3 credits Social Science
    c. 3 credits Behavioral Science
    d. 3 credits Mathematics and/or Natural Science
    e. 6 credits additional from General Studies area
4. 25% of the total program credits must be completed at Gateway
5. For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Protective and Human Services

Veterinary Technician (10-098-1)

Associate of Applied Science

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/veterinary-technician. Please see your academic advisor for additional information.

E-D = Elkhorn/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	E-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S
1	806-105	4	Principles of Animal Biology	Prereq: 838-105; 851-757 OR 831-107	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must receive a "B" or better in 806-105 before they can enroll in this course.	F/S
1	*098-123	2	Veterinary Medical Terminology	Prereq: Program Admission	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S
2	*098-120	1	Animal Behavior	Prereq: Program Admission		S/SU
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S/SU
2	806-197	4	Microbiology	Prereq: 806-105 OR 806-177 OR 806-196 OR 806-238	• It is preferred that students in this program complete 806-105 as the prereq for this course. • The prerequisite for 806-197 (806-105 OR 806-177) must have been completed with a "C" or better.	S/SU
3	809-166	3	Ethics: Theory and Apps, Intro to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/F
3	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/F
3	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU/F
4	*098-101	3	Animal Care and Management	Prereq: Instructor Consent Coreq: 806-105; 091-120 OR 098-120	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.	F/S
4	*098-102	3	Veterinary Business Practices	Coreq: 091-101 OR 098-101		F/S

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Veterinary Technician (10-098-1) - Effective 2026/2027

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	E-D
5	*098-103	4	Clinical Pathology I for Vet Sciences	Prereq: 091-101 OR 098-101; 091-102 OR 098-102; 806-105	• Students must receive a "B" or better in 806-105 before they can enroll in this course.	S/SU
5	*098-105	3	Surgical Procedures I for Vet Sciences	Coreq: 091-103 OR 098-103		S/SU
5	*098-107	3	Imaging for Veterinary Sciences	Coreq: 091-103 OR 098-103		S/SU
6	*098-104	4	Clinical Pathology II for Vet Sciences	Coreq: 091-108 OR 098-108; 806-197		SU/F
6	*098-108	3	Veterinary Pharmacology	Prereq: 834-109; Coreq: 091-110 OR 098-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/F
6	*098-110	2	Clinical Skills I for Vet Science	Prereq: Instructor Consent	• Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.	SU/F
7	*098-106	3	Surgical Procedures II for Vet Sciences	Prereq: 091-108 OR 098-108; 091-110 OR 098-110 Coreq: 091-113 OR 098-113		F/S
7	*098-113	3	Anesthesia for Veterinary Technicians	Prereq: 091-108 OR 098-108; 091-110 OR 098-110; Coreq: 091-106 OR 098-106		F/S
7	*098-124	3	Large Animal Care & Medicine	Prereq: 091-108 OR 098-108; 091-110 OR 098-110		F/S
8	*098-109	2	Lab Animals and Non-Traditional Pets	Prereq: 091-106 OR 098-106; 091-113 OR 098-113		S/SU
8	*098-114	4	Veterinary Tech. Clinical Internship	Prereq: 091-106 OR 098-106; 091-113 OR 098-113		S/SU
8	*098-125	2	Diseases of Domestic Animals	Prereq: 091-106 OR 098-106; 091-113 OR 098-113; 091-124 OR 098-124		S/SU

Minimum Program Total Credits Required: NUMBER

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Veterinary Technician (10-098-1)

In this program, students learn veterinary technical skills such as how to care for and handle animals, provide medical and surgical nursing including anesthesiology and dental prophylaxis, and perform radiography and clinical laboratory procedures. Applicable federal, state, and local law and ethical guidelines are presented to students throughout the program. Students complete clinical work under the direction of certified veterinary technicians and veterinarians. Graduates will be eligible to take the Veterinary Technician National Exam (VTNE) administered by the Veterinary Examining Board of the Wisconsin Department of Agriculture, Trade, and Consumer Protection. Certified Veterinary Technicians provide professional support to veterinarians in veterinary clinics and hospitals, biological research settings, animal control and humane organizations, zoos, and educational facilities.

Program Learning Outcomes

Graduates will be able to:

1. Manage veterinary business functions.
2. Integrate all aspects of patient management for anesthetic, surgical, and medical nursing procedures.
3. Produce diagnostic radiographic images.
4. Perform laboratory procedures.
5. Administer prescribed drugs.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check and official high school, GED or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 66 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students must maintain minimum course grades of "C" or better for all courses marked with an (*) to remain in the program.
2. A laptop computer, stethoscope, uniform, and other supplies will be needed.
3. Nearly daily exposure to latex and/or animal fur and dander will occur in this program. Those with sensitivities may find exposure impossible to avoid.
4. Immunocompromised individuals should consult their physician before enrollment.
5. Clinical sites are located throughout and potentially outside the district. Students are responsible for their own transportation.
6. Some clinical sites require TB testing and immunizations against tetanus and hepatitis B. Rabies immunization is required.
7. This program is full-time. Students should expect to be in class Monday-Friday 8 am-5 pm.
8. Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
9. Students admitted to the program must complete a volunteer shadowing experience in an approved clinical setting prior to registering for a Veterinary Technician course. Documentation requirements will be included in the program admission packet.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Advanced EMT (30-531-6)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/advanced-emt. Please see your academic advisor for additional information.

HE-E = HERO Center/evenings, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HE-E
1	*531-103	4	Advanced EMT	Prereq: Program Admission	• A valid Wisconsin EMT license will be accepted in place of 531-103.	S
1	*531-104	1	Advanced EMT – Clinical	Prereq: Program Admission; 531-103		S

Minimum Program Total Credits Required: 5

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Advanced EMT (30-531-6)

If you currently hold a State of Wisconsin licensure as an Emergency Medical Technician (EMT), you can pursue additional training in intravenous access, fluid and medication administration, clinical decision making skills, and patient assessment at this advanced level. Upon completion of the didactic, lab, and clinical components of this program, the participant will be eligible for testing and credentialing through the National Registry of Emergency Medical Technicians®.

Program Learning Outcomes

Graduates will be able to:

1. Perform EMT Operations
2. Assess patient(s)
3. Treat patient(s)

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must submit a current CPR certification.
3. Students must have current Wisconsin EMS licensure.
4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 5 credits with a cumulative GPA of 2.0 or above.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
2. COVID-19 policy at field and clinical sites are subject to change at the discretion of the sites themselves. EMT program students must abide by field and clinical site COVID-19 policies while participating in clinical or field time at these sites.
3. Applicants of this program are subject to a review of their criminal backgrounds as a part of the training center training permit process. Positive background checks may negatively impact your ability to pursue EMS education at Gateway Technical College.
4. Drug testing and/or immunizations are required prior to clinical practice during the program.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Business and Transportation

Accounting Assistant (31-101-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/accounting-assistant. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*101-114	4	Accounting Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	*101-128	3	QuickBooks Online	Coreq: 101-114 OR 101-112	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	103-143	3	Computers for Professionals			F/S/SU
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*101-119	3	Payroll Accounting			F/S/SU
2	*101-106	3	Accounting Spreadsheet Apps.			F/S/SU
2	*101-104	4	Income Tax Accounting			F/S/SU
2	*101-116	3	Corporate Accounting	Prereq: 101-114; Coreq: 804-134 OR 804-135; 801-136;103-143 OR 103-102		F/S/SU
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU

Minimum Program Total Credits Required: 30

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students who are interested in continuing into the 10-101-1 Accounting Program can earn their associate degree by completing an additional 34 credits. Please see your academic advisor for details.

Accounting Assistant (31-101-1)

Students who complete this one-year technical diploma will be able to compute, classify and record accounting information to keep financial records complete. They will proficiently be able to perform any routine calculating, posting and verifying duties primary to maintaining accurate financial records. Additionally, students will be able to perform general office duties including filing and handling routine correspondence to employees, customers and vendors. Students who complete this technical diploma will be able to obtain employment as an office manager, accounting clerk, bookkeeper, accounting assistant, or accounting associate.

Program Learning Outcomes

Graduates will be able to:

1. Process financial transactions throughout the accounting cycle.
2. Analyze basic financial and business information to support planning and decision-making.
3. Perform payroll preparation, reporting, and analysis tasks.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 30 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Accounting is a laptop program. Students will need a Windows-Based computer (with a hard drive) for use in the classroom. Please note MAC computers are not compatible with some of the required software.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Accounting Assistant (31-101-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/accounting-assistant. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*101-114	4	Accounting Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	103-143	3	Computers for Professionals			F/S/SU
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
2	*101-119	3	Payroll Accounting			F/S/SU
2	*101-128	3	QuickBooks Online	Coreq: 101-114 OR 101-112	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU
3	*101-116	3	Corporate Accounting	Prereq: 101-114; Coreq: 804-134 OR 804-135; 801-136; 103-143 OR 103-102		F/S/SU
4	*101-106	3	Accounting Spreadsheet Apps.			F/S/SU
4	*101-104	4	Income Tax Accounting			F/S/SU

Minimum Program Total Credits Required: 30

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Students who are interested in continuing into the 10-101-1 Accounting Program can earn their associate degree by completing an additional 34 credits. Please see your academic advisor for details.

Accounting Assistant (31-101-1)

Students who complete this one-year technical diploma will be able to compute, classify and record accounting information to keep financial records complete. They will proficiently be able to perform any routine calculating, posting and verifying duties primary to maintaining accurate financial records. Additionally, students will be able to perform general office duties including filing and handling routine correspondence to employees, customers and vendors. Students who complete this technical diploma will be able to obtain employment as an office manager, accounting clerk, bookkeeper, accounting assistant, or accounting associate.

Program Learning Outcomes

Graduates will be able to:

1. Process financial transactions throughout the accounting cycle.
2. Analyze basic financial and business information to support planning and decision-making.
3. Perform payroll preparation, reporting, and analysis tasks.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 30 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Accounting is a laptop program. Students will need a Windows-Based computer (with a hard drive) for use in the classroom. Please note MAC computers are not compatible with some of the required software.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Automotive Maintenance Technician (31-404-3)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/automotive-maintenance. Please see your academic advisor for additional information.

HZ-D = Horizon Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq- with)	Notes	HZ-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*602-130	3	Auto Shop Essentials		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*602-107	2	Auto Service Fundamentals	Prereq: 602-130		F
1	*602-104	3	Brake Systems	Prereq: 602-107; 602-130		F
1	*602-124	3	Steering & Suspension Systems	Prereq: 602-107; 602-130		F
2	*602-125	2	Electrical & Electronic Systems 1	Prereq: 602-107; 602-130 Coreq: 804-134 OR 804-135	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*602-127	3	Electrical & Electronic Systems 2	Prereq: 602-125		S
2	*602-196	3	Climate Control Systems	Prereq: 602-127		S
2	*602-204	3	Engine Repair 1	Prereq: 602-107; 602-130		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
3	801-196	3	Oral/Interpersonal Communication			SU+

Minimum Program Total Credits Required: 32

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Students interested in continuing into the 10-602-3 Automotive Technology program can earn their associate degree by completing an additional 33 credits. Please see your academic advisor for details.

Automotive Maintenance Technician (31-404-3)

Automotive Maintenance Technician gives an overview of essential servicing techniques, including the testing, repairing, and rebuilding of basic automotive systems. Graduates of this program have the skills necessary for entry-level employment at automotive repair facilities and retail service centers or to pursue an Associate of Applied Science degree in a two-year automotive program. The student will be prepared to take up to four ASE tests in the following areas: brakes, suspension and steering, heating and air conditioning, and electrical systems. Special emphasis will be placed on mechanical relationships and basic engine performance. Students will be able to apply the techniques learned in lectures in an automotive shop laboratory setting. This will be accomplished in a simulated work environment.

Program Learning Outcomes

Graduates will be able to:

1. Diagnose, service, and repair Suspension and Steering systems of light duty vehicles.
2. Diagnose, service, and repair Brake systems of light duty vehicles.
3. Diagnose, service, and repair Heating, Ventilating and Air Conditioning systems of light duty vehicles.
4. Diagnose and service Gasoline Engines of light duty vehicles.
5. Service Engine Performance related systems of light duty vehicles.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 32 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription safety glasses are needed, allow at least 90 days before the program start to obtain prescription and glasses.
2. A student supplied tablet computer is required for all 602 courses. Please contact the department prior to purchasing a computer for the minimum specification sheet.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Protective and Human Services

Barber Technologist (30-502-5)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/barber. Please see your academic advisor for additional information.

K-D = Kenosha/days F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	*502-736	2	Barber Industry	Prereq: Advisor OR Instructor Consent		S/F
1	*502-742	1	Intro to Barbering	Prereq: Advisor OR Instructor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/F
1	*502-738	2	Basic Haircutting	Prereq: Advisor OR Instructor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/F
1	*502-735	2	Advanced Haircutting	Prereq: 502-738		S/F
1	*502-741	2	Hairstyling	Prereq: Advisor OR Instructor Consent		S/F
1	*502-740	2	Hair Color	Prereq: Advisor OR Instructor Consent		S/F
1	*502-743	2	Shaving	Prereq: Advisor OR Instructor Consent		S/F
1	*502-739	2	Chemical Texturing	Prereq: Advisor OR Instructor Consent		S/F
2	*502-730	2	Client Services 1 Haircutting	Prereq: Advisor OR Instructor Consent; 502-738; 502-735; 502-741; 502-740; 502-743; 502-739		SU/S
2	*502-731	2	Client Services 2 Chemical Services	Prereq: Advisor OR Instructor Consent; 502-738; 502-735; 502-741; 502-740; 502-743; 502-739		SU/S
2	*502-732	2	Client Services 3 Male Facial/Shaving	Prereq: Advisor OR Instructor Consent; 502-738; 502-735; 502-741; 502-740; 502-743; 502-739		SU/S
2	*502-733	2	Client Service Skills 4	Prereq: Advisor OR Instructor Consent; 502-738; 502-735; 502-741; 502-740; 502-743; 502-739		SU/S
2	*502-734	2	Client Services 5 State Board Skills/Prep	Prereq: Advisor OR Instructor Consent; 502-738; 502-735; 502-741; 502-740; 502-743; 502-739		SU/S

Minimum Program Total Credits Required: 25

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

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Barber Technologist (30-502-5)

The *Barber Technologist* program offers a variety of courses such as Haircutting, Shaving, Styling, Color, Chemical Texture Services, and Male Facials. In addition to barber ownership or barber management, one can choose from positions in sales, advertising, research, and education.

Program Learning Outcomes

Graduates will be able to:

1. Adhere to current state and federal administrative codes and statues for barbers.
2. Perform shampoo, haircut, and style service.
3. Demonstrate facial hair removal techniques.
4. Perform male facial procedures.
5. Perform chemical services.
6. Develop business practices for industry success.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following to indicate reading readiness for the program: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or submit proof of minimum test scores (15 ACT Reading; 19 SAT Reading, 237 Accuplacer Reading)
3. Students must view the Information Video online and submit the corresponding electronic form verifying understanding of information presented.
4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 25 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a high-demand program with limited openings.
2. Supplies and materials are required for this program. All kits, books, workbooks, Milady CIMA Online Student Learning, and the required uniform smock must be purchased prior to beginning the first day of the program from the campus bookstore. Full black scrubs are also required and must be purchased independently prior to the beginning of the program.
3. Students must be 18 years of age or a high school graduate to take the state licensure exam.
4. Students must complete all classroom portions of instruction except 502-742 and 502-736 before beginning any of the client services courses.
5. Prospective students should apply to the program to be assigned an advisor, who will provide consent to enroll in 502 program courses.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

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Part-Time Pathway to Success
School of Manufacturing, Engineering, and Information Technology

Building Trades - Carpentry (31-475-1)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/building-trades-carpentry. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*475-302	2	Residential Print Reading		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*475-303	3	Framing Techniques 1	Coreq: 607-141 OR 475-300	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*475-308	3	Fundamentals of Wood Construction			F
1	*607-141	2	Construction Basics			F
2	*475-304	1	Commercial Print Reading	Prereq: 475-302		S
2	*475-305	3	Framing Techniques 2	Prereq: 475-303		S
2	*475-310	3	Interior Finish Trim	Prereq: 607-141 OR 475-300		S
2	804-370	2	Mathematics I / Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	*607-102	2	Conflict Resolution in Construction			S
3	*475-306	3	Exterior Trim	Prereq: 607-141 OR 475-300		SU
3	*475-309	3	Fundamentals of Concrete Construction	Prereq: 607-141 OR 475-300		SU
3	*475-311	3	Interior Coverings	Prereq: 607-141 OR 475-300		SU
3	*475-312	2	Residential Cabinetry			SU

Minimum Program Total Credits Required: 33

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Building Trades - Carpentry (31-475-1)

The *Building Trades - Carpentry* program provides the student with the knowledge and skills necessary for job success in the industry. Fundamentals of industry materials, building design, and layout operation are taught in the classroom. The use of hand and power tools is developed in the shop. Construction techniques are developed in the shop. Related mathematics, blueprint reading and welding are included in the training.

Program Learning Outcomes

Graduates will be able to:

1. Use hand and power tools and equipment.
2. Apply industry recognized safety practices and procedures.
3. Analyze sustainable building practices.
4. Interpret construction drawings.
5. Interpret building codes.
6. Demonstrate industry building practices and material application.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 33 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students will be required to purchase a variety of personal safety items that will be utilized throughout the program.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Business Operations (31-102-5)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/business-services-manager. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU
1	*101-114	4	Accounting Principles			F/S/SU
1	*102-137	3	Business / Intro to			F/S/SU
1	*102-160	3	Business Law		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	*103-143	3	Computers for Professionals			F/S/SU
2	801-198	3	Speech			F/S/SU
2	*104-101	3	Marketing Principles			F/S/SU
2	*104-104	3	Selling Principles			F/S/SU
2	*104-105	3	Promotion Principles			F/S/SU
2	*196-191	3	Supervision			F/S/SU

Minimum Program Total Credits Required: 29

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-102-3 Business Management program can earn their associate degree by completing an additional 33 credits. Please see your academic advisor for details.

Business Operations (31-102-5)

The focus of the *Business Operations* diploma is to provide the learner with knowledge in the major functional areas of a business including law, accounting, information technology, and marketing. Students will develop competence in the business functions of planning organizing, directing and controlling. Graduates will be prepared to supervise the work of office administrative, or customer service employees to ensure adherence to quality standards, deadlines, and proper procedures, and will be equipped to implement corporate or departmental policies, procedures, and service standards in conjunction with management.

Program Learning Outcomes

Graduates will be able to:

1. Plan the operations of a business across functional areas.
2. Organize resources to achieve the goals of the organization.
3. Direct individuals and/or processes to meet organizational goals.
4. Control business processes.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 29 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Business Operations (31-102-5)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/business-services-manager. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*102-137	3	Business / Intro to			F
1	*196-191	3	Supervision			F
2	*102-160	3	Business Law		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*104-101	3	Marketing Principles			S
2	*104-104	3	Selling Principles			S
2	*104-105	3	Promotion Principles			S
3	*101-114	4	Accounting Principles			F
3	*103-143	3	Computers for Professionals			F
3	801-198	3	Speech			F

Minimum Program Total Credits Required: 29

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-102-3 Business Management program can earn their associate degree by completing an additional 33 credits. Please see your academic advisor for details.

Business Operations (31-102-5)

The focus of the *Business Operations* diploma is to provide the learner with knowledge in the major functional areas of a business including law, accounting, information technology, and marketing. Students will develop competence in the business functions of planning organizing, directing and controlling. Graduates will be prepared to supervise the work of office administrative, or customer service employees to ensure adherence to quality standards, deadlines, and proper procedures, and will be equipped to implement corporate or departmental policies, procedures, and service standards in conjunction with management.

Program Learning Outcomes

Graduates will be able to:

1. Plan the operations of a business across functional areas.
2. Organize resources to achieve the goals of the organization.
3. Direct individuals and/or processes to meet organizational goals.
4. Control business processes.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 29 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

CNC Production Technician (31-444-2)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cnc-production-technician. Please see your academic advisor for additional information.

E-D = Elkhorn/days, I-D = iMET/days F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	E-D	I-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*444-316	3	Foundations of CNC Machining			F	F
1	*444-331	3	CNC Machining Technology		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*444-337	3	Fund. of Blueprint and Shop Safety		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*444-339	3	Gauging and Quality Control			F	F
2	*444-333	3	Fund. of CNC Turning Applications	Prereq: 444-331		S	S
2	*444-334	3	Fund. Of CNC Milling Applications			S	S
2	*444-335	3	CNC Lathe Set-Up			S	S
2	*444-336	3	CNC Mill Set-Up			S	S
2	804-370	2	Mathematics I, Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • A hand calculator capable of trigonometric functions is required for this course; the cost is approximately $25.	S	S

Minimum Program Total Credits Required: 27

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 31-444-3 CNC Programmer program can earn their technical diploma by completing an additional 12 credits. Please see your academic advisor for details.

CNC Production Technician (31-444-2)

CNC Production Technician is a well-rounded approach to becoming a CNC Technician. We teach the skills necessary for students to become qualified set-up technicians. Students are taught the basics of G-Code programming, proper M-Code usage, and the required steps to efficiently set fixture and tool offsets. Students create their own CNC programs and DNC to the proper machine tool. An excellent overall knowledge of CNC Controls is achieved by working on several different brand name controls. Overall, students will be proficient at programming, set-up, operation, editing, and part inspection.

Program Learning Outcomes

Graduates will be able to:

1. Apply basic safety practices in the machine shop.
2. Interpret industrial/engineering drawings.
3. Apply precision measuring methods to part inspection.
4. Perform basic machine tool equipment set-up and operation.
5. Perform programming, set-up, and operations of CNC machine tools.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 27 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses (marked Z-87) are required in labs. If prescription glasses are needed, allow a minimum of 90 days before the program start to obtain prescription and glasses.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

CNC Production Technician (31-444-2)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cnc-production-technician. Please see your academic advisor for additional information.

I-E = iMET/Evenings F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	S+
1	*444-331	3	CNC Machining Technology		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
1	*444-337	3	Fund. of Blueprint and Shop Safety		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
1	*444-339	3	Gauging and Quality Control			S+
2	*444-316	3	Foundations of CNC Machining			SU
2	*444-334	3	Fund. Of CNC Milling Applications			SU
2	804-370	2	Mathematics I, Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • A hand calculator capable of trigonometric functions is required for this course; the cost is approximately $25.	SU+
3	*444-333	3	Fund. of CNC Turning Applications	Prereq: 444-331		F
3	*444-335	3	CNC Lathe Set-Up			F
3	*444-336	3	CNC Mill Set-Up			F

Minimum Program Total Credits Required: 27

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Students interested in continuing into the 31-444-3 CNC Programmer program can earn their technical diploma by completing an additional 12 credits. Please see your academic advisor for details.

CNC Production Technician (31-444-2)

CNC Production Technician is a well-rounded approach to becoming a CNC Technician. We teach the skills necessary for students to become qualified set-up technicians. Students are taught the basics of G-Code programming, proper M-Code usage, and the required steps to efficiently set fixture and tool offsets. Students create their own CNC programs and DNC to the proper machine tool. An excellent overall knowledge of CNC Controls is achieved by working on several different brand name controls. Overall, students will be proficient at programming, set-up, operation, editing, and part inspection.

Program Learning Outcomes

Graduates will be able to:

1. Apply basic safety practices in the machine shop.
2. Interpret industrial/engineering drawings.
3. Apply precision measuring methods to part inspection.
4. Perform basic machine tool equipment set-up and operation.
5. Perform programming, set-up, and operations of CNC machine tools.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 27 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses (marked Z-87) are required in labs. If prescription glasses are needed, allow a minimum of 90 days before the program start to obtain prescription and glasses.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

CNC Programmer (31-444-3)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cnc. Please see your academic advisor for additional information.

E-D = Elkhorn/days, I-D = iMET/days F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	E-D	I-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*444-316	3	Foundations of CNC Machining			F	F
1	*444-331	3	CNC Machining Technology		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*444-337	3	Fund. of Blueprint and Shop Safety		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F
1	*444-339	3	Gauging and Quality Control			F	F
2	*444-333	3	Fund. of CNC Turning Applications	Prereq: 444-331		S	S
2	*444-334	3	Fund. of CNC Milling Applications			S	S
2	*444-335	3	CNC Lathe Set-Up			S	S
2	*444-336	3	CNC Mill Set-Up			S	S
2	804-370	2	Mathematics I, Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • A hand calculator capable of trigonometric functions is required for this course; the cost is approximately $25.	S	S
3	*444-307 **OR** *444-308	3	Fund. of Swiss CNC Turning **OR** Fund. of Live Tooling			SU	SU
3	*444-306 **OR** *444-309	3	Swiss CNC Setup and Operation **OR** Live Tooling Setup and Operation			SU	SU
3	*444-311	3	CNC Lathe Process	Prereq: 444-335		SU	SU
3	*444-314	3	CNC Mill Process	Prereq: 444-336		SU	SU

Minimum Program Total Credits Required: 39

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

CNC Programmer (31-444-3)

The *CNC Programmer* technical diploma program gives an overview of essential machine shop practices including machine safety, blueprint reading and part inspection methods. CNC Machine programming, set-up and operation will also be covered in-depth. Graduates of this program will have the skills necessary for entry-level employment in a machine shop setting. Machinists already employed will find the program a great way to improve their skill set. Special emphasis will be placed on learning the skills necessary to transform raw material into a finished part. Students will be able to apply the techniques learned in lectures within a machine shop setting. Overall this program is intended to introduce students to many different aspects within a machine shop setting.

Program Learning Outcomes

Graduates will be able to:

1. Apply basic safety practices in the machine shop.
2. Interpret industrial/engineering drawings.
3. Apply precision measuring methods to part inspection.
4. Perform basic machine tool equipment set-up and operation.
5. Perform programming, set-up, and operation on CNC milling centers.
6. Perform programming, set-up, and operation on CNC turning centers.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 39 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses (marked Z-87) are required in labs. If prescription glasses are needed, allow a minimum of 90 days before the program start to obtain prescription and glasses.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

CNC Programmer (31-444-3)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cnc. Please see your academic advisor for additional information.

E-D = Elkhorn/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq- before/ coreq-with)	Notes	E-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*444-331	3	CNC Machining Technology		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*444-337	3	Fund. of Blueprint and Shop Safety		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*444-339	3	Gauging and Quality Control			F
2	*444-316	3	Foundations of CNC Machining			S
2	*444-334	3	Fund. of CNC Milling Applications			S
2	804-370	2	Mathematics I, Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details. • A hand calculator capable of trigonometric functions is required for this course; the cost is approximately $25.	S
3	*444-307 **OR** *444-308	3	Fund. of Swiss CNC Turning **OR** Fund. of Live Tooling			SU
3	*444-306 **OR** *444-309	3	Swiss CNC Setup and Operation **OR** Live Tooling Setup and Operation			SU
3	*444-333	3	Fund. of CNC Turning Applications	Prereq: 444-331		SU
4	*444-335	3	CNC Lathe Set-Up			F
4	*444-336	3	CNC Mill Set-Up			F
5	*444-311	3	CNC Lathe Process	Prereq: 444-335		S
5	*444-314	3	CNC Mill Process	Prereq: 444-336		S

Minimum Program Total Credits Required: 39

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

CNC Programmer (31-444-3)

The *CNC Programmer* technical diploma program gives an overview of essential machine shop practices including machine safety, blueprint reading and part inspection methods. CNC Machine programming, set-up and operation will also be covered in-depth. Graduates of this program will have the skills necessary for entry-level employment in a machine shop setting. Machinists already employed will find the program a great way to improve their skill set. Special emphasis will be placed on learning the skills necessary to transform raw material into a finished part. Students will be able to apply the techniques learned in lectures within a machine shop setting. Overall this program is intended to introduce students to many different aspects within a machine shop setting.

Program Learning Outcomes

Graduates will be able to:

1. Apply basic safety practices in the machine shop.
2. Interpret industrial/engineering drawings.
3. Apply precision measuring methods to part inspection.
4. Perform basic machine tool equipment set-up and operation.
5. Perform programming, set-up, and operation on CNC milling centers.
6. Perform programming, set-up, and operation on CNC turning centers.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 39 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses (marked Z-87) are required in labs. If prescription glasses are needed, allow a minimum of 90 days before the program start to obtain prescription and glasses.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Construction Management Technician (31-455-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/construction. Please see your academic advisor for additional information.

I-D = iMET Center/days, I-E = iMET Center/evenings, E-D = Elkhorn/days, E-E = Elkhorn/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D	I-E	E-D	E-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+	F+	F	F
1	*607-104	3	Building Material & Construction Method		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F	F	F
1	*607-136	2	Construction Project Management			F	F	F	F
1	*607-141	2	Construction Basics			F	F	F	F
1	*607-170	2	AutoCAD for Construction Sciences			F	F	F	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+	F+	F	F
2	*607-102	2	Conflict Resolution in CET			S+	S+	S	S
2	*607-128	3	Construction Estimating	Coreq: 801-136; 804-134 OR 804-135 OR 804-115		S	S	S	S
2	*607-129	2	Future Trends Civil/Archi Tech	Prereq: 607-104; 607-141		S	S	S	S
2	*614-102	2	Capstone: Construction Project Management 2	Prereq: 607-136		S	S	S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S+	S	S
3	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+	SU+	SU	SU
3	*607-169	2	Surveying Basics			SU	SU	SU	SU
3	*607-187	2	3D CAD: Dig Terrain Model			SU	SU	SU	SU
3	*614-150	2	3D CAD: Building Information Modeling			SU	SU	SU	SU

Minimum Program Total Credits Required: 34

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Racine.

Students interested in continuing into the 10-614-6 Architectural-Structural Engineering Technician program can earn their associate degree by completing an additional 31 credits. Please see your academic advisor for details.

Construction Management Technician (31-455-1)

The Construction Management Technician diploma prepares learners to assist construction project managers and senior staff with the scheduling, supervision and coordination of construction tasks or trade workers. Learners will gain skills in reading specifications and blueprints to determine construction requirements or to plan procedures, inspect work progress, equipment, or construction sites to ensure that specifications are met.

Program Learning Outcomes

Graduates will be able to:

1. Develop construction schedules.
2. Evaluate building materials.
3. Analyze risk in a construction project.
4. Explore building modeling and construction related software.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 34 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Classes offered at Elkhorn Campus via NODAL delivery. See www.gtc.edu for details.
2. Safety glasses may be required in various classes after the first semester. If prescription safety glasses are required, please allow sufficient time to obtain your glasses prior to the start of the 2nd semester.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Construction Management Technician (31-455-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/construction. Please see your academic advisor for additional information.

I-D = iMET Center/days, I-E = iMET Center/evenings, E-D = Elkhorn/days, E-E = Elkhorn/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	I-D	I-E	E-D	E-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+	F+	F	F
1	*607-141	2	Construction Basics			F	F	F	F
1	*607-104	3	Building Material & Construction Method		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F	F	F	F
2	*607-102	2	Conflict Resolution in CET			S	S	S	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S+	S	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+	S+	S	S
3	*607-169	2	Surveying Basics			SU	SU	SU	SU
3	*607-187	2	3D CAD: Dig Terrain Model			SU	SU	SU	SU
3	*614-150	2	3D CAD: Building Information Modeling			SU	SU	SU	SU
4	*607-136	2	Construction Project Management			F	F	F	F
4	*607-170	2	AutoCAD for Construction Sciences			F	F	F	F
4	809-195	3	Economics	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F+	F+	F	F
5	*614-102	2	Capstone: Construction Project Management 2	Prereq: 607-136		S	S	S	S
5	*607-128	3	Construction Estimating	Coreq: 801-136; 804-134 OR 804-135 OR 804-115		S	S	S	S
5	*607-129	2	Future Trends Civil/Archi Tech	Prereq: 607-104; 607-141		S	S	S	S

Minimum Program Total Credits Required: 34

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Racine.

Students interested in continuing into the 10-614-6 Architectural-Structural Engineering Technician program can earn their associate degree by completing an additional 31 credits. Please see your academic advisor for details.

Construction Management Technician (31-455-1)

The Construction Management Technician diploma prepares learners to assist construction project managers and senior staff with the scheduling, supervision and coordination of construction tasks or trade workers. Learners will gain skills in reading specifications and blueprints to determine construction requirements or to plan procedures, inspect work progress, equipment, or construction sites to ensure that specifications are met.

Program Learning Outcomes

Graduates will be able to:

1. Develop construction schedules.
2. Evaluate building materials.
3. Analyze risk in a construction project.
4. Explore building modeling and construction related software.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 34 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Classes offered at Elkhorn Campus via NODAL delivery. See www.gtc.edu for details.
2. Safety glasses may be required in various classes after the first semester. If prescription safety glasses are required, please allow sufficient time to obtain your glasses prior to the start of the 2nd semester.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Protective and Human Services

Cosmetology (31-502-1)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cosmetology. Please see your academic advisor for additional information.

B-D = Burlington/days, R-D = Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq- with)	Notes	B-D	R-D
1	*502-312	1	Intro to Barber/Cosmetology	Prereq: Advisor OR Instructor Consent		F/S	F/S
1	*502-301	1	Shampoo Treatment	Prereq: Advisor OR Instructor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S	F/S
1	*502-324	2	Barber/Cosmetology Industry	Prereq: Advisor OR Instructor Consent		F/S	F/S
1	*502-366	2	Women's Haircutting	Prereq: Advisor OR Instructor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S	F/S
1	*502-352	2	Men's Haircutting	Prereq: 502-366		F/S	F/S
1	*502-353	2	Perm Techniques	Prereq: Advisor OR Instructor Consent		F/S	F/S
1	*502-345	2	Basic Hair Color	Prereq: Advisor OR Instructor Consent		F/S	F/S
1	*502-349	2	Facials	Prereq: Advisor OR Instructor Consent		F/S	F/S
1	*502-350	2	Hair Design 1	Prereq: Advisor OR Instructor Consent		F/S	F/S
2	*502-372	2	Basic Manicuring	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
2	*502-348	2	Chemical Straightening	Prereq: Advisor OR Instructor Consent; 502-353		S/SU	S/SU
2	*502-347	2	Bleaching	Prereq: Advisor OR Instructor Consent; 502-345		S/SU	S/SU
2	*502-351	2	Hair Design 2	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
2	*502-354	1	Salon Service 1 Facial Skin Care	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
2	*502-355	1	Salon Service 2 Nail Skills	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
2	*502-356	1	Salon Service 3 Long Hair Design	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
2	*502-367	1	Salon Service 4 Women's Haircutting	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
2	*502-308	1	Salon Service 5 Perming	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
2	*502-309	1	Salon Service 6 Men's Haircutting	Prereq: Advisor OR Instructor Consent		S/SU	S/SU
3	*502-373	2	Salon Service 7 Hair Color	Prereq: Advisor OR Instructor Consent		SU/F	SU/F
3	*502-374	2	Salon Service 8 Hairstyling	Prereq: Advisor OR Instructor Consent		SU/F	SU/F
3	*502-375	2	Salon Service 9 Chemical Relaxing	Prereq: Advisor OR Instructor Consent		SU/F	SU/F
3	*502-376	2	Salon Service 10 Interpersonal Skills	Prereq: Advisor OR Instructor Consent		SU/F	SU/F
3	*502-364	1	Salon Service 11 Bleaching	Prereq: Advisor OR Instructor Consent		SU/F	SU/F
3	*502-365	1	Salon Service 12 Shampoo	Prereq: Advisor OR Instructor Consent		SU/F	SU/F
3	*502-377	2	Mock Board Theory	Prereq: Advisor OR Instructor Consent		SU/F	SU/F
3	*502-370	2	Mock Board Skills	Prereq: Advisor OR Instructor Consent		SU/F	SU/F

Minimum Program Total Credits Required: 44

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Cosmetology (31-502-1)

Exciting careers are open to the licensed, experienced Cosmetologists. In addition to salon ownership, salon management, and specialization of a service, one can choose from positions in sales, advertising, research, education, and makeup artistry. The possibilities are unlimited and so is the income potential. Students receive instruction in Cosmetology skills such as hair designing, haircutting, hair coloring, permanent waving, and manicuring. Classes in makeup artistry, sculptured nails, color analysis, and salon management are also included.

Program Learning Outcomes

Graduates will be able to:

1. Perform shampoo, haircut, and style services.
2. Perform skin care services.
3. Perform chemical services.
4. Perform nail services.
5. Develop business practices for industry success.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following to indicate reading readiness for the program: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or submit proof of minimum test scores (15 ACT Reading; 19 SAT Reading, 237 Accuplacer Reading).
3. Students must view the Information Video online and submit the corresponding electronic form verifying understanding of information presented.
4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 44 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a high demand program with limited openings.
2. Supplies and materials are required for this program. All kits, books, workbooks, Milady CIMA Online Student Learning, and the required uniform smock must be purchased prior to beginning the first day of the program from the campus bookstore. Full black scrubs are also required and must be purchased independently prior to the beginning of the program.
3. Students must be 18 years of age or a high school graduate to take the state licensure exam.
4. Students must complete both 502-337 Manicure/Nail Technician I and 502-338 Manicure/Nail Technician II to be eligible to take the Wisconsin Manicurist/Nail Technician license exam.
5. Students must complete all classroom portions of a course except 502-312 or 502-324 before beginning any of the Salon Services or Mock Board courses.
6. These courses require the following prerequisites: 502-301; 502-345; 502-320; 502-347; 502-348; 502-349; 502-350; 502-351; 502-352; 502-353; and 502-366.
7. Prospective students should apply to the program to be assigned an advisor, who will provide consent to enroll in 502 program courses.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Protective and Human Services

Cosmetology (31-502-1)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cosmetology. Please see your academic advisor for additional information.

K-E = Kenosha/evenings F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K/E
1	*502-312	1	Intro to Barber/Cosmetology	Prereq: Advisor OR Instructor Consent		F
1	*502-301	1	Shampoo Treatment	Prereq: Advisor OR Instructor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*502-350	2	Hair Design 1	Prereq: Advisor OR Instructor Consent		F
1	*502-366	2	Women's Haircutting	Prereq: Advisor OR Instructor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*502-352	2	Men's Haircutting	Prereq: 502-366		F
2	*502-353	2	Perm Techniques	Prereq: Advisor OR Instructor Consent		S
2	*502-345	2	Basic Hair Color	Prereq: Advisor OR Instructor Consent		S
2	*502-349	2	Facials	Prereq: Advisor OR Instructor Consent		S
3	*502-324	2	Barber/Cosmetology Industry	Prereq: Advisor OR Instructor Consent		SU
3	*502-348	2	Chemical Straightening	Prereq: Advisor OR Instructor Consent; 502-353		SU
3	*502-347	2	Bleaching	Prereq: Advisor OR Instructor Consent; 502-345		SU
4	*502-372	2	Basic Manicuring	Prereq: Advisor OR Instructor Consent		F
4	*502-351	2	Hair Design 2	Prereq: Advisor OR Instructor Consent		F
4	*502-354	1	Salon Service 1 Facial Skin Care	Prereq: Advisor OR Instructor Consent		F
4	*502-355	1	Salon Service 2 Nail Skills	Prereq: Advisor OR Instructor Consent		F
4	*502-356	1	Salon Service 3 Long Hair Design	Prereq: Advisor OR Instructor Consent		F
5	*502-367	1	Salon Service 4 Women's Haircutting	Prereq: Advisor OR Instructor Consent		S
5	*502-308	1	Salon Service 5 Perming	Prereq: Advisor OR Instructor Consent		S
5	*502-309	1	Salon Service 6 Men's Haircutting	Prereq: Advisor OR Instructor Consent		S
5	*502-373	2	Salon Service 7 Hair Color	Prereq: Advisor OR Instructor Consent		S
5	*502-374	2	Salon Service 8 Hairstyling	Prereq: Advisor OR Instructor Consent		S
5	*502-375	2	Salon Service 9 Chemical Relaxing	Prereq: Advisor OR Instructor Consent		S
6	*502-376	2	Salon Service 10 Interpersonal Skills	Prereq: Advisor OR Instructor Consent		SU
6	*502-364	1	Salon Service 11 Bleaching	Prereq: Advisor OR Instructor Consent		SU
6	*502-365	1	Salon Service 12 Shampoo	Prereq: Advisor OR Instructor Consent		SU
6	*502-370	2	Mock Board Skills	Prereq: Advisor OR Instructor Consent		SU
6	*502-377	2	Mock Board Theory	Prereq: Advisor OR Instructor Consent		SU

Minimum Program Total Credits Required: 44

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Cosmetology (31-502-1)

Exciting careers are open to the licensed, experienced Cosmetologists. In addition to salon ownership, salon management, and specialization of a service, one can choose from positions in sales, advertising, research, education, and makeup artistry. The possibilities are unlimited and so is the income potential. Students receive instruction in Cosmetology skills such as hair designing, haircutting, hair coloring, permanent waving, and manicuring. Classes in makeup artistry, sculptured nails, color analysis, and salon management are also included.

Program Learning Outcomes

Graduates will be able to:

1. Perform shampoo, haircut, and style services.
2. Perform skin care services.
3. Perform chemical services.
4. Perform nail services.
5. Develop business practices for industry success.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following to indicate reading readiness for the program: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or submit proof of minimum test scores (15 ACT Reading; 19 SAT Reading, 237 Accuplacer Reading).
3. Students must view the Information Video online and submit the corresponding electronic form verifying understanding of information presented.
4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 44 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. This is a high demand program with limited openings.
2. Supplies and materials are required for this program. All kits, books, workbooks, Milady CIMA Online Student Learning, and the required uniform smock must be purchased prior to beginning the first day of the program from the campus bookstore. Full black scrubs are also required and must be purchased independently prior to the beginning of the program.
3. Students must be 18 years of age or a high school graduate to take the state licensure exam.
4. Students must complete both 502-337 Manicure/Nail Technician I and 502-338 Manicure/Nail Technician II to be eligible to take the Wisconsin Manicurist/Nail Technician license exam.
5. Students must complete all classroom portions of a course except 502-312 or 502-324 before beginning any of the Salon Services or Mock Board courses.
6. These courses require the following prerequisites: 502-301; 502-345; 502-320; 502-347; 502-348; 502-349; 502-350; 502-351; 502-352; 502-353; and 502-366.
7. Prospective students should apply to the program to be assigned an advisor, who will provide consent to enroll in 502 program courses.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Criminal Justice – Law Enforcement 720 Academy (30-504-2)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/law-enforcement-academy. Please see your academic advisor for additional information.

K-D = Kenosha/days, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	504-500	2	Overview of Patrol Response			S/SU
1	504-501	1	Physical Fitness			S/SU
1	504-502	1	Application of Investigations			S/SU
1	504-503	1	Overview of Criminal Justice			S/SU
1	504-504	2	Principles of Emergency Vehicle Response			S/SU
1	504-505	2	Sensitive Crimes			S/SU
1	504-506	2	Overview of Investigation			S/SU
1	504-507	3	Application of Traffic Response			S/SU
1	504-508	1	Principles of Investigations			S/SU
1	504-509	5	Principles of Tactics		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/SU
1	504-510	1	Overview of Tactics		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/SU
2	504-511	1	Law Enforcement Academy Scenario Week			S/SU

Minimum Program Total Credits Required: 22

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Criminal Justice – Law Enforcement 720 Academy (30-504-2)

The *720 Hour Law Enforcement Academy* is designed to prepare the candidate to perform the essential functions of a law enforcement officer in the State of Wisconsin. The competency-based instruction meets the criteria set forth by the Wisconsin Department of Justice, Training and Standards Bureau. Training is delivered in three phases through a combination of lecture, labs, interactive group discussion, hands-on instruction, and integration exercises. The Academy meets daily Monday through Friday for 18 weeks.

Program Learning Outcomes

Graduates will be able to:

1 Think critically.
2 Manage emergencies.
3 Communicate effectively.
4 Demonstrate professionalism.
5 Conduct investigations.
6 Interact with others.
7 Demonstrate tactical skills.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

Step 1:

1 Students must submit an application and pay $30 fee.
2 Students must submit an official college transcript verifying an associate degree or higher in Criminal Justice or at least 40 postsecondary credits earned. Students earning credits at Gateway Technical College do not need a Gateway transcript but should note the completion of credits on their application.
3 Students must request and pay for a background check. Applicants of this program are subject to a review of their criminal backgrounds. Positive background checks may negatively impact your ability to pursue this career at Gateway Technical College. Each case will be individually evaluated based on all available evidence provided to the college.
4 Students must complete DJLE-327 Application for Enrollment form.
5 Students must submit a copy of a valid driver's license.
6 Students must submit Verification of Age and Citizenship form.
7 Students must submit an abstract copy of their driving record from their state's Department of Motor Vehicles.
8 Students must pass the Physical Readiness Test.

Step 2:

1 Students will participate in an interview. Selected candidates will need to submit a DJLE-332 Medical Assessment form, LEA Medical Clearance form, and Responsibility for Personal Medical Needs form.
2 Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1 Minimum grade of 2.0 ("C") or above in all courses.
2 Satisfactorily demonstrate proficiency in all hands-on unified tactical areas of training (DAAT, EVOC, Firearms, Vehicle Contacts).
3 Pass the scenario-based final assessment exercise.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1 For detailed information about this program please visit the Law Enforcement website: www.gtc.edu/LEAcademy
2 Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Documentation Manager, and/or Drug Testing.
3 Background checks for the Law Enforcement Academy program are valid for 6 months. Students must request a current background check every 6 months they are enrolled or re-apply.
4 In order to be admitted to the academy candidates must pass a Physical Readiness Test administered by academy staff. This test must be completed before an interview can be scheduled.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Protective and Human Services

Culinary Assistant (31-316-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/culinary-arts. Please see your academic advisor for additional information.

E-D = Elkhorn/days, R-D = Racine/days, F=Fall, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	E-D	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*316-150	4	Culinary Basics	Coreq: 316-170	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • A uniform and knife kit is required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	F	F
1	*316-151	4	Basic Baking	Coreq: 316-170	• A uniform and knife kit is required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	F	F
1	*316-170	1	Sanitation and Hygiene		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	F	F
1	804-134	3	Mathematics Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F	F
2	*316-152	4	Intermediate Culinary	Prereq: 316-170; 316-150 OR 316-131	• A uniform and knife kit is required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	S	S
2	*316-153	3	Garde Manger/Cold Kitchen	Prereq: 316-170; 316-150 OR 316-131	• A uniform and knife kit is required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	S	S
2	*316-154	3	Advanced Baking	Prereq: 316-170; 316-151 OR 316-140	• A uniform and knife kit is required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	S	S
2	801-196	3	Oral Interpersonal Communication			S	S

Minimum Program Total Credits Required: 26

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-316-1 Culinary Arts program can earn their associate degree by completing an additional 34 credits. Please see your academic advisor for details.

Culinary Assistant (31-316-1)

The *Culinary Assistant* diploma prepares individuals to serve under the supervision of chefs and other food service professionals as kitchen support staff and commercial food preparation workers. Coursework includes instruction in kitchen organization and operations, sanitation and quality control, basic food preparation and cooking skills, kitchen and kitchen equipment maintenance, and quantity food measurement and monitoring.

Program Learning Outcomes

Graduates will be able to:

1. Apply principles of safety and sanitation in food service operations.
2. Apply basic principles of nutrition.
3. Demonstrate basic culinary skills.
4. Assist in food service management.
5. Plan menus.
6. Explore food service financial information.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 26 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Protective and Human Services

Culinary Assistant (31-316-1)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/culinary-arts. Please see your academic advisor for additional information.

E-D = Elkhorn/days, R-D = Racine/days, F=Fall, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	E-D	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*316-150	4	Culinary Basics	Coreq: 316-170	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • A uniform and knife kit are required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	F	F
1	*316-170	1	Sanitation and Hygiene		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	F	F
2	*316-152	4	Intermediate Culinary	Prereq: 316-170; 316-150 OR 316-131	• A uniform and knife kit are required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	S	S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S
3	*316-151	4	Basic Baking	Coreq: 316-170	• A uniform and knife kit are required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	F	F
3	801-196	3	Oral Interpersonal Communication			F	F
4	*316-153	3	Garde Manger/Cold Kitchen	Prereq: 316-170; 316-150 OR 316-131	• A uniform and knife kit are required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	S	S
4	*316-154	3	Advanced Baking	Prereq: 316-170; 316-151 OR 316-140	• A uniform and knife kit are required for this course. Please contact your advisor for more information. • Students must pass all 316 Culinary courses with a C or better to move on to the next course.	S	S

Minimum Program Total Credits Required: 26

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-316-1 Culinary Arts program can earn their associate degree by completing an additional 34 credits. Please see your academic advisor for details.

Culinary Assistant (31-316-1)

The *Culinary Assistant* diploma prepares individuals to serve under the supervision of chefs and other food service professionals as kitchen support staff and commercial food preparation workers. Coursework includes instruction in kitchen organization and operations, sanitation and quality control, basic food preparation and cooking skills, kitchen and kitchen equipment maintenance, and quantity food measurement and monitoring.

Program Learning Outcomes

Graduates will be able to:

1. Apply principles of safety and sanitation in food service operations.
2. Apply basic principles of nutrition.
3. Demonstrate basic culinary skills.
4. Assist in food service management.
5. Plan menus.
6. Explore food service financial information.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 26 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Dental Assistant (31-508-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/dental-assistant. Please see your academic advisor for additional information.

R-D = Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq- with)	Notes	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	SU
1	801-301	1	Writing Principles	Prereq: 851-756	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details	SU
1	801-302	1	Speaking Principles			SU
2	*508-101	1	Dental Health Safety	Prereq: Advisor Consent		F
2	*508-103	2	Dental Radiography	Prereq: Advisor Consent; Coreq: 508-101; 508-304		F
2	*508-113	2	Dental Materials	Prereq: Advisor Consent		F
2	*508-302	5	Dental Chairside	Prereq: Advisor Consent Coreq: 508-101; 508-304; 508-113	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
2	*508-304	2	Dental and General Anatomy	Prereq: Advisor Consent	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
2	*508-306	3	Dental Assistant Clinical	Prereq: Advisor Consent Coreq: 508-101 508-103; 508-113; 508-302; 508-304; 508-307	• Travel is required to clinical sites. Students must provide their own transportation. • Students must have a valid CPR certification on file with the college to be eligible to register for this course. Must be completed prior to taking this course.	F
2	*508-307	1	Dental Assistant Professionalism	Prereq: Advisor Consent	• This course will be taught online. Basic computer literacy and Brightspace knowledge are highly recommended.	F
3	*508-120	2	Dental Office Management	Prereq: 508-307	• This course will be taught online. Basic computer literacy and Brightspace knowledge are highly recommended.	S
3	*508-308	5	Dental Chairside – Advanced	Prereq: 508-302		S
3	*508-309	4	Dental Laboratory Procedure	Prereq: 508-113		S
3	*508-310	1	Dental Radiography – Advanced	Prereq: 508-103		S
3	*508-311	2	Dental Assistant Clinical – Advanced	Prereq: 508-306, Coreq: 508-308, 508-309, 508-310	• Travel is required to clinical sites. Students must provide their own transportation. • Students must have a valid CPR certification on file with the college to be eligible to register for this course. Must be completed prior to taking this course. • Course 508-311 Dental Assistant Clinical - Advanced utilizes a Pass/Fail grading system.	S

Minimum Program Total Credits Required: 33

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Dental Assistant (31-508-1)

Dental Assistant program prepares graduates to work with dentists as they examine and treat patients. Dental Assistants with documented skills also may carry out a variety of laboratory, clinical and office duties. Some dental assistants manage the office and are responsible for patient scheduling and bookkeeping functions. Graduates receive a technical diploma and are eligible to write the certification examination of the Dental Assisting National Board. Most dental assistants work in general or specialized dental offices, either for individual dentists or for groups of dentists. Some dental assistants may choose to work for insurance companies, dental laboratories, or dental supply companies. The dental assistant also may find employment with federal agencies such as the Veterans' Administration, United States Public Health Services, the Armed Forces, or a state, county or city health facility. The Dental Assistant Program is only offered on a full-time basis, Monday through Friday.

Program Learning Outcomes

Graduates will be able to:

1. Perform a variety of advanced supportive dental procedures.
2. Manage infection and hazard control.
3. Produce diagnostic intraoral and extraoral radiographs on a
4. variety of patients.
5. Perform advanced dental laboratory procedures.
6. Demonstrate professional behaviors, ethics, and appearance.
7. Perform dental office business procedures.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check and official high school, GED or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 33 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Any non-508 course may be taken prior to entry in the program, assuming requisites have been satisfied (or waived with departmental approval).
2. This is a high demand program that utilizes a priority placement process for enrollment in core program courses.
3. Please note that your program may require one or all of the following additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Business and Transportation

Diesel Equipment Mechanic (31-412-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/diesel-equipment-mechanic. Please see your academic advisor for additional information.

HZ-E = Horizon Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*412-111	2	Diesel Maintenance Fundamentals		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*412-116	3	Diesel Preventative Maintenance	Prereq: 412-111		F
1	*412-106	4	Diesel Brake Systems	Prereq: 412-111		F
1	*412-117	3	Diesel Suspension & Steering Systems	Prereq: 412-111		F
2	*412-112	4	Diesel Drive Trains	Coreq: 804-135		S
2	*412-107	4	Diesel Electricity 1	Prereq: 412-111	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	801-196	3	Oral/Interpersonal Communication			S+
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
3	*412-114	3	Diesel Heating, Cooling & Air Cond.	Prereq: 412-107; Coreq: 801-136		SU

Minimum Program Total Credits Required: 33

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Students interested in continuing into the 10-412-1 Diesel Equipment Technology program can earn their associate degree by completing an additional 32 credits. Please see your academic advisor for details.

Diesel Equipment Mechanic (31-412-1)

Diesel Equipment Mechanic is a one-year repair and maintenance program designed to prepare an entry level diesel technician. This program is the first year of the associate degree Diesel Equipment Technology program. Program instruction will include over the road, off road and stationary applications. Emphasis will be placed on the fundamentals and repair of diesel engines, and basic diesel vehicle systems including brakes, heating, cooling, and electrical/electronic.

Program Learning Outcomes

Graduates will be able to:

1. Diagnose, repair, and service brake systems.
2. Diagnose, repair, and service electric/electronic systems.
3. Diagnose, repair, and service drive train systems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 33 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Tablet computer required for this program. See an advisor for a fact sheet describing minimum requirement.
2. Work uniform is required. See an advisor for details.
3. Safety glasses are required in labs. If prescription safety glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.
4. A state issued Commercial Driver License (CDL) is not required for the program but highly recommended. Gateway Technical College will offer CDL training starting May 2019.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Business and Transportation

Diesel Equipment Mechanic (31-412-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/diesel-equipment-mechanic. Please see your academic advisor for additional information.

HZ-E = Horizon Center/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HZ-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F+
1	*412-111	2	Diesel Maintenance Fundamentals		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*412-116	3	Diesel Preventative Maintenance	Prereq: 412-111		F
1	*412-106	4	Diesel Brake Systems	Prereq: 412-111		F
2	*412-117	3	Diesel Suspension & Steering Systems	Prereq: 412-111		S
2	*412-112	4	Diesel Drive Trains	Coreq: 804-135		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S+
3	*412-107	4	Diesel Electricity 1	Prereq: 412-111	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU
3	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU+
4	801-196	3	Oral/Interpersonal Communication			F+
4	*412-114	3	Diesel Heating, Cooling & Air Cond.	Prereq: 412-107; Coreq: 801-136		F

Minimum Program Total Credits Required: 33

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

(+) Students may take this course at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Students interested in continuing into the 10-412-1 Diesel Equipment Technology program can earn their associate degree by completing an additional 32 credits. Please see your academic advisor for details.

Diesel Equipment Mechanic (31-412-1)

Diesel Equipment Mechanic is a one-year repair and maintenance program designed to prepare an entry level diesel technician. This program is the first year of the associate degree Diesel Equipment Technology program. Program instruction will include over the road, off road and stationary applications. Emphasis will be placed on the fundamentals and repair of diesel engines, and basic diesel vehicle systems including brakes, heating, cooling, and electrical/electronic.

Program Learning Outcomes

Graduates will be able to:

1. Diagnose, repair, and service brake systems.
2. Diagnose, repair, and service electric/electronic systems.
3. Diagnose, repair, and service drive train systems.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 33 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Tablet computer required for this program. See an advisor for a fact sheet describing minimum requirement.
2. Work uniform is required. See an advisor for details.
3. Safety glasses are required in labs. If prescription safety glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.
4. A state issued Commercial Driver License (CDL) is not required for the program but highly recommended. Gateway Technical College will offer CDL training starting May 2019.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Electromechanical Maintenance Technician (31-620-3)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/electromechanical-maintenance-technician. Please see your academic advisor for additional information.

I-D = iMET/days, L-E = Lakeview/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	I-D	L-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*628-109	3	Mechanical Skills for Technicians			F	F
1	*664-100	2	Industrial Control Systems, Intro to			F	F
1	*664-110	2	Mechatronics, Intro to			F	F
2	*620-108	3	Fundamentals of Industrial Controls	Prereq: 664-100		S	S
2	*664-112	3	Fundamentals of Machining Processes			S	S
3	*612-102	3	Pneumatic/Hydraulics, Intro			F	SU
3	*664-105	2	Intro to Industrial Robots			F	SU
3	*664-116	2	Intro to Mfg Quality Control Systems			F	SU
4	*664-103	3	Motor Controls for Manufacturing			S	F
4	*664-104	2	Industrial Control System Applications	Coreq: 664-103; 664-118		S	F
4	*664-118	3	PLC & HMI Programming			S	F

Minimum Program Total Credits Required: 29

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-664-2 Advanced Manufacturing Technician program can earn their associate degree by completing an additional 36 credits. Please see your academic advisor for details.

Electromechanical Maintenance Technician (31-620-3)

Electromechanical Maintenance Technicians are multi-skilled individuals proficient in many tasks giving them the skills to assemble, install, troubleshoot, repair, and modify machinery. After completing this diploma, students will be able to perform repairs, maintenance and troubleshooting on hydraulic, pneumatic systems, motors and motor controls, mechanical drives, PLC's, HMI's and robotic systems. Students will also learn manual machining to fabricate parts, precision measurements, applicable math, communication skills, and industrial safety concepts.

Program Learning Outcomes

Graduates will be able to:

1. Perform Work Safely
2. Apply basic troubleshooting process for electrical and mechanical systems and devices
3. Repair basic electrical and mechanical systems
4. Communicate technical information

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 29 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. A hand calculator capable of trigonometric functions is required: Cost is approximately $25.
2. Safety glasses are required in labs. If prescription safety glasses are necessary, allow a minimum of 90 days.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Electromechanical Maintenance Technician (31-620-3)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/electromechanical-maintenance-technician. Please see your academic advisor for additional information.

I-D = iMET Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	I-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*612-102	3	Pneumatic/Hydraulics, Intro			F
1	*628-109	3	Mechanical Skills for Technicians			F
1	*664-100	2	Industrial Control Systems, Intro to			F
1	*664-105	2	Intro to Industrial Robots			F
1	*664-110	2	Mechatronics, Intro to			F
1	*664-116	2	Intro to Mfg Quality Control Systems			F
2	*620-108	3	Fundamentals of Industrial Controls	Prereq: 664-100		S
2	*664-103	3	Motor Controls for Manufacturing			S
2	*664-104	2	Industrial Control System Applications	Coreq: 664-103; 664-118		S
2	*664-112	3	Fundamentals of Machining Processes			S
2	*664-118	3	PLC & HMI Programming			S

Minimum Program Total Credits Required: 29

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-664-2 Advanced Manufacturing Technician program can earn their associate degree by completing an additional 36 credits. Please see your academic advisor for details.

Electromechanical Maintenance Technician (31-620-3)

Electromechanical Maintenance Technicians are multi-skilled individuals proficient in many tasks giving them the skills to assemble, install, troubleshoot, repair, and modify machinery. After completing this diploma, students will be able to perform repairs, maintenance and troubleshooting on hydraulic, pneumatic systems, motors and motor controls, mechanical drives, PLC's, HMI's and robotic systems. Students will also learn manual machining to fabricate parts, precision measurements, applicable math, communication skills, and industrial safety concepts.

Program Learning Outcomes

Graduates will be able to:

1. Perform Work Safely
2. Apply basic troubleshooting process for electrical and mechanical systems and devices
3. Repair basic electrical and mechanical systems
4. Communicate technical information

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 29 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. A hand calculator capable of trigonometric functions is required: Cost is approximately $25.
2. Safety glasses are required in labs. If prescription safety glasses are necessary, allow a minimum of 90 days.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Emergency Medical Technician (30-531-3)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/emergency-medical-technician. Please see your academic advisor for additional information.

HE-D = HERO Center/days, HE-E = HERO Center/evenings, R-D = Racine/days K-E = Kenosha/evenings F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	HE-D	HE-E	R-D	K-E
1	*531-100	3	EMR to EMT 1	Prereq: Program Admission	F/S/SU	F/S	F	S
1	*531-101	4	EMR to EMT 2	Prereq: Program Admission; 531-100	F/S/SU	F/S	F	S

Minimum Program Total Credits Required: 7

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Emergency Medical Technician (30-531-3)

Emergency Medical Technician is a 180-hour entry-level training in emergency medicine. This program provides students the skills and knowledge needed to assess and manage all types of injuries and acute illnesses while providing safe and rapid patient transport to an appropriate medical facility. Components of the course include lecture, practical lab, and hospital clinical experience. Upon program completion, students are prepared to take the National Registry of Emergency Medical Technicians® examination to be licensed as an Emergency Medical Technician in Wisconsin. Students wishing to pursue other levels of EMS licensure, such as Advanced EMT or Paramedic, must first be licensed as an Emergency Medical Technician before being eligible to register in subsequent EMS licensure programs.

Program Learning Outcomes

Graduates will be able to:

1. Perform EMT Operations
2. Assess patient(s)
3. Treat patient(s)

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 7 credits with a cumulative GPA of 2.0 or above.
2. For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. It is recommended that applicants enroll in 531-101 within one year of completing 531-100 due to possible curriculum changes and degradation of skill competency/knowledge.
2. COVID-19 policy at field and clinical sites are subject to change at the discretion of the sites themselves. EMT program students must abide by field and clinical site COVID-19 policies while participating in clinical or field time at these sites.
3. Students who successfully complete 531-100 may be credentialed by the NREMT as Emergency Medical Responders (EMRs).
4. Applicants of this program are subject to a review of their criminal backgrounds as a part of the training center training permit process. Positive background checks may negatively impact your ability to pursue EMS education at Gateway Technical College.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Protective and Human Services

EMT - Paramedic (31-531-1)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/emt-paramedic. Please see your academic advisor for additional information.

HE-D = HERO Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	HE-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*531-911	2	EMS Fundamental	Prereq: 838-105 OR 851-757; Program Admission	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Prior to enrolling in paramedic level courses, a student must satisfactorily complete an EMS specific pre-admission screening which includes both written and practical components at the Emergency Medical Technician level (EMT) and attend an informational orientation with the program staff.	F
1	*531-912	4	Paramedic Medical Principles	Coreq: 531-911	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*531-913	3	Adv. Patient Asses. Principles	Coreq: 531-911		F
1	*531-914	3	Adv. Pre-Hospital Pharmacology	Coreq: 531-911		F
1	*531-915	2	Paramedic Respiratory Mgt.	Coreq: 531-914		F
1	*531-926	1	Paramedic Hospital Field	Coreq: 531-912	• Drug testing and immunizations are required prior to admission to the first clinical course (531-926 or 531-927).	F
1	*531-928	2	Paramedic HPS Lab I	Coreq: 531-912		F
1	*531-955	2	Paramedic Cardiology 1	Coreq: 531-915	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
2	*531-956	2	Paramedic Cardiology 2	Prereq: 531-955		S
2	*531-918	1	Adv. Emergency Resuscitation	Coreq: 531-955		S
2	*531-919	4	Paramedic Medical Emergencies	Coreq: 531-955		S
2	*531-920	3	Paramedic Trauma	Coreq: 531-955		S
2	*531-921	3	Special Patient Populations	Coreq: 531-955		S
2	*531-922	1	EMS Operations	Coreq: 531-955		S
2	*531-923	1	Paramedic Capstone	Coreq: 531-955		S
2	*531-927	2	Paramedic Hospital/Field II	Coreq: 531-955	• Drug testing and immunizations are required prior to admission to the first clinical course (531-926 or 531-927).	S
2	*531-929	2	Paramedic HPS Lab II	Prereq: 531-928 Coreq: 531-955		S

Minimum Program Total Credits Required: 39

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-531-1 Paramedic Technician program can earn an associate degree by completing an additional 26 credits. Please see your academic advisor for details.

EMT - Paramedic (31-531-1)

Paramedic requires students to be licensed in Wisconsin at the Emergency Medical Technician (EMT), Advanced EMT (EMT Intermediate Technician), or EMT Intermediate level and be current in Healthcare Provider CPR. Paramedics can perform more acute care and administer advanced drug therapies. They can also perform surgical procedures to open airways and provide resuscitative drugs. Paramedics have an increased knowledge of lifesaving skills as well as advanced emergency assessment expertise. This program is offered on a part time basis: either two evenings a week and Saturdays or an alternating day class 2-3 days a week to accommodate the typical 24 hour on/48 hour off schedule worked by many FF/EMS agencies. At the end of the program, students will take a final Gateway Technical College written and practical exam, and after successful completion students will be eligible to test and credential through the National Registry of Emergency Medical Technicians®. The program includes approximately 650 hours of classroom lecture and skills lab, and approximately 500 hours of supervised hospital clinical and field time. Satisfactory completion of clinical/field time is competency based so actual number of hours may vary from student to student. Graduates of this program can expect to find employment with private ambulance companies, fire departments, or hospital emergency rooms. Students finishing the first two semesters of the program (the 531 courses) are eligible to receive the Paramedic Technical Diploma (31-531-1). All courses in the EMT-Paramedic diploma program can be applied to the Paramedic Technician associate degree.

Program Learning Outcomes

Graduates will be able to:

1. Prepare for incident response and EMS operations.
2. Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
3. Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters.
4. Communicate effectively with others.
5. Demonstrate professional behavior.
6. Meet state and national competencies listed for paramedic credentialing.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Students must have current CPR certification.
4. Students must have current Wisconsin EMS licensure.
5. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 39 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Applicants of this program are subject to a review of their criminal backgrounds as part of the training center training permit process. Positive background checks may negatively impact your ability to pursue this career at Gateway Technical College.
2. Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
3. It is recommended that applicants re-enroll in the Paramedic program within one year of exiting due to possible curriculum changes and degradation of skill competency/knowledge.
4. COVID-19 policy at field and clinical sites are subject to change at the discretion of the sites themselves. Paramedic program students must abide by field and clinical site COVID-19 policies while participating in clinical field time at these sites.

Accreditation Statement

The EMT Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 N., Suite 158
Clearwater, FL 33763
727-210-2350
www.caahep.org

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Manufacturing, Engineering, and Information Technology

Facilities Maintenance (31-443-2)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/facilities-maintenance. Please see your academic advisor for additional information.

K-E = Kenosha/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*443-310	1	Fundamentals of Construction		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F
1	*443-312	2	Basic Carpentry and Repair	Coreq: 443-310	• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F
1	*461-120	3	Small Power Equipment		• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F
1	801-301	1	Writing Principles	Prereq: 851-756		F
2	804-370	2	Mathematics I, Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	801-302	1	Speaking Principles			S
2	*443-315	2	Industrial Preventative Maintenance	Coreq: 443-310		S
2	*443-314	2	Mechanical Systems	Coreq: 443-310		S
3	*443-313	2	Interior Finishing	Coreq: 443-310 Prereq: 804-370		SU
3	*601-112	2	Environmental Systems	Coreq: 801-301		SU
3	*401-304	3	HVAC Electricity/Electronics		• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	SU
4	*443-101	1	Forklift Operation & Maintenance		• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F
4	*443-311	3	Electrical Applications	Prereq: 601-304; Coreq: 443-310		F
4	*601-305	3	Facility Operating Engineer LP		• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F

Minimum Program Total Credits Required: 29

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Facilities Maintenance (31-443-2)

Facilities Maintenance provides the training needed to service, maintain, and operate equipment found in public, commercial, and other buildings. Typical operations employing facilities (building) maintenance workers include hospitals, government buildings, schools, hotels, apartment buildings, light manufacturing facilities, and office buildings. The required skills and knowledge include basic carpentry, basic electricity, basic HVAC (heating, ventilating, and air conditioning), basic plumbing, electrical control devices, and safety.

Program Learning Outcomes

Graduates will be able to:

1. Repair/replace basic electrical components.
2. Perform preventative maintenance procedures.
3. Perform basic drywall repairs.
4. Perform basic plumbing repairs.
5. Use portable tools safely.
6. Apply sustainable practices to facility operations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 29 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students will be required to purchase a variety of personal safety items and hand tools that will be utilized throughout the program. Specifications for those hand tools will be provided by the instructor at the beginning of the program, and should not be purchased in advance of the start of the program.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Fire Science (30-503-5)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/firefighter-technician. Please see your academic advisor for additional information.

HE-D=HERO Center/Days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HE-D
1	*503-301	3	Firefighting Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S
1	*503-302	2	Fire Prevention			F/S
1	*503-303	3	Principles of Em Serv Safety & Survival			F/S
1	*503-304	3	Building Construction			F/S
1	*531-100	3	EMR/EMT 1	Prereq: Program Admission		F/S
2	*503-305	3	Driver/Operator Pumper	Prereq: 503-142 OR 503-301		S/F
2	*503-306	2	Firefighting Principles II	Prereq: 503-142 OR 503-301		S/F
2	*503-307	2	Firefighter Health & Wellness			S/F
2	*531-101	4	EMT 2	Prereq: Program Admission; 531-100		S/F

Minimum Program Total Credits Required: 25

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Fire Science (30-503-5)

The *Fire Science program* will provide applicants with foundational entry level knowledge and practice to pursue a career in the fire service. Students are able to apply health & wellness principles to their own professional lives, and prepare for the candidate physical ability test (CPAT) certificate. Requisite building construction, fire behavior, fire protection systems, fire department risk management and soft skills are stressed, along with life-long learning and living habits to become safe and effective fire service professionals. Students will be eligible for employment as a firefighter for volunteer or career service. Additionally, the diploma provides a pathway to the Fire Medic and Paramedic Associate Degree Programs.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate professional conduct.
2. Perform fire prevention activities
3. Apply incident management and mitigation skills to emergency incidents
4. Meet professional fire and EMS credentialing standards
5. Communicate clearly and effectively
6. Apply critical thinking skills to both emergency and non-emergency situations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 25 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Eye protection may be required in some courses. If prescription safety glasses are required, please allow a minimum of 90 days before the program start to obtain prescription and glasses.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Fire Science (30-503-5)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/firefighter-technician. Please see your academic advisor for additional information.

HE-D=HERO Center/Days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	HE-D
1	*503-301	3	Firefighting Principles		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S
1	*503-302	2	Fire Prevention			F/S
1	*531-100	3	EMR/EMT 1	Prereq: Program Admission		F/S
2	*503-304	3	Building Construction			S/F
2	*531-101	4	EMT 2	Prereq: Program Admission; 531-100		S/F
3	*503-303	3	Principles of Em Serv Safety & Survival			F/S
3	*503-305	3	Driver/Operator Pumper	Prereq: 503-142 OR 503-301		F/S
3	*503-306	2	Firefighting Principles II	Prereq: 503-142 OR 503-301		F/S
3	*503-307	2	Firefighter Health & Wellness			F/S

Minimum Program Total Credits Required: 25

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Fire Science (30-503-5)

The *Fire Science program* will provide applicants with foundational entry level knowledge and practice to pursue a career in the fire service. Students are able to apply health & wellness principles to their own professional lives, and prepare for the candidate physical ability test (CPAT) certificate. Requisite building construction, fire behavior, fire protection systems, fire department risk management and soft skills are stressed, along with life-long learning and living habits to become safe and effective fire service professionals. Students will be eligible for employment as a firefighter for volunteer or career service. Additionally, the diploma provides a pathway to the Fire Medic and Paramedic Associate Degree Programs.

Program Learning Outcomes

Graduates will be able to:

1 Demonstrate professional conduct.
2 Perform fire prevention activities
3 Apply incident management and mitigation skills to emergency incidents
4 Meet professional fire and EMS credentialing standards
5 Communicate clearly and effectively
6 Apply critical thinking skills to both emergency and non-emergency situations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3 Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1 Minimum 25 credits with a cumulative GPA of 2.0 or above.
2 *Minimum of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1 Eye protection may be required in some courses. If prescription safety glasses are required, please allow a minimum of 90 days before the program start to obtain prescription and glasses.
2 Some courses may be available during the evening. Please contact your advisor for more information.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

IT – Computer Support Technician (31-154-6)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/it-computer-support-technician. Please see your academic advisor for additional information.

R-D = Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*107-011	3	IT in Business			F
1	*107-193	3	IT Essentials		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*150-152	3	IT Tech Skills			F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*150-145	3	IT Scripting			S
2	*154-114	3	Hardware & Software Support	Prereq: 150-152 OR 107-193		S
2	*154-119	3	System Software Support	Coreq: 801-136		S
2	*154-122	3	Introduction to Help/Service Desk	Prereq: 107-193		S
3	801-197	3	Technical Reporting	Prereq: 801-136		SU
3	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU

Minimum Program Total Credits Required: 31

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-154-3 IT – Computer Support Specialist program can earn their associate degree by completing an additional 30 credits. Please see your academic advisor for details.

IT – Computer Support Technician (31-154-6)

The *IT-Computer Support Technician* program will provide the first step toward a career in IT which focuses on the support of end users. This program is designed to serve as a pathway into the IT-Computer Support Specialist (10-154-3) associate degree program. Students completing this program will have the option to continue into the parent program or become employed directly in the field. Graduates will have opportunities for employment reaching across all industries.

The IT-Computer Support Technician program is comprised of the first two semesters of the IT-Computer Support Specialist associate degree program. Specific course work includes: System Software Support, IT in Business, IT Essentials, Help/Service Desk, Scripting and Technical Reporting. This coursework starts you down the path to earn your A+.

Program Learning Outcomes

Graduates will be able to:

1. Provide entry level end user support.
2. Manage operating systems and application software.
3. Support information technology hardware.
4. Provide basic network support for existing network installations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 31 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

IT – Computer Support Technician (31-154-6)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/it-computer-support-technician. Please see your academic advisor for additional information.

R-D = Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*107-011	3	IT in Business			F
1	*107-193	3	IT Essentials		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*150-152	3	IT Tech Skills			F
2	*154-119	3	System Software Support	Coreq: 801-136		S
2	*154-122	3	Introduction to Help/Service Desk	Prereq: 107-193		S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*154-114	3	Hardware & Software Support	Prereq: 150-152 OR 107-193		SU
3	*150-145	3	IT Scripting			SU
4	801-197	3	Technical Reporting	Prereq: 801-136		F
4	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F

Minimum Program Total Credits Required: 31

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-154-3 IT – Computer Support Specialist program can earn their associate degree by completing an additional 30 credits. Please see your academic advisor for details.

IT – Computer Support Technician (31-154-6)

The *IT-Computer Support Technician* program will provide the first step toward a career in IT which focuses on the support of end users. This program is designed to serve as a pathway into the IT-Computer Support Specialist (10-154-3) associate degree program. Students completing this program will have the option to continue into the parent program or become employed directly in the field. Graduates will have opportunities for employment reaching across all industries.

The IT-Computer Support Technician program is comprised of the first two semesters of the IT-Computer Support Specialist associate degree program. Specific course work includes: System Software Support, IT in Business, IT Essentials, Help/Service Desk, Scripting and Technical Reporting. This coursework starts you down the path to earn your A+.

Program Learning Outcomes

Graduates will be able to:

1. Provide entry level end user support.
2. Manage operating systems and application software.
3. Support information technology hardware.
4. Provide basic network support for existing network installations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 31 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Horticulture Technician (31-001-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/horticulture-technician. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*001-185	3	Horticulture, Introduction to		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	*001-143	3	Herbaceous Plants	Coreq: 001-185		F
1	*001-146	1	Sustainable Landscape			F
1	*001-147	1	Soils & Plant Nutrition			F
1	*001-148	1	Plant Pests & Beneficial			F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*001-129	1	Pesticide Applicator Cert			S
2	*001-142	3	Vegetable Science		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	*001-151	3	Greenhouse Crops	Coreq: 801-136; 804-134 OR 804-135		S
2	461-120	3	Small Power Equipment			S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 26

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Horticulture Technician (31-001-1)

Horticulture Technician is a one-year embedded technical diploma that builds upon the skills gained in the Horticulture Basics career pathway certificate and can lead directly into Greenhouse Operations or Landscape Horticulture. Learners gain a broad understanding of the horticulture field and basic technical skills to make them an asset to any company in the green industry. Work duties are typically very hands-on. Upon completion of this one-year program, you will also receive your Wisconsin Commercial Pesticide Applicator Certification.

Program Learning Outcomes

Graduates will be able to:

1. Analyze growing media.
2. Diagnose plant health.
3. Communicate as a horticulture professional.
4. Apply design principles.
5. Provide horticulture maintenance.
6. Apply the principles of plant science.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 26 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Horticulture Technician (31-001-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/horticulture-technician. Please see your academic advisor for additional information.

K-D = Kenosha/days, F=Fall, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*001-185	3	Horticulture, Introduction to		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*001-142	3	Vegetable Science		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S
2	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*001-143	3	Herbaceous Plants	Coreq: 001-185		F
3	*001-146	1	Sustainable Landscape			F
3	*001-147	1	Soils & Plant Nutrition			F
3	*001-148	1	Plant Pests & Beneficial			F
4	*001-129	1	Pesticide Applicator Cert			S
4	*001-151	3	Greenhouse Crops	Coreq: 801-136; 804-134 OR 804-135		S
4	461-120	3	Small Power Equipment		• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 26

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Horticulture Technician (31-001-1)

Horticulture Technician is a one-year embedded technical diploma that builds upon the skills gained in the Horticulture Basics career pathway certificate and can lead directly into Greenhouse Operations or Landscape Horticulture. Learners gain a broad understanding of the horticulture field and basic technical skills to make them an asset to any company in the green industry. Work duties are typically very hands-on. Upon completion of this one-year program, you will also receive your Wisconsin Commercial Pesticide Applicator Certification.

Program Learning Outcomes

Graduates will be able to:

1. Analyze growing media.
2. Diagnose plant health.
3. Communicate as a horticulture professional.
4. Apply design principles.
5. Provide horticulture maintenance.
6. Apply the principles of plant science.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 26 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Medical Assistant (31-509-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/medical-assistant. Please see your academic advisor for additional information.

O=Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq- with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	S/F
1	*509-301	2	Medical Assistant Admin Procedures	Prereq: Program Admission; Coreq: 501-107		S/F
1	*509-303	2	Medical Assistant Lab Procedures 1	Prereq: Program Admission; Coreq: 509-304		S/F
1	*509-304	4	Medical Assistant Clinical Procedures 1	Prereq: Program Admission; Coreq: 509-303		S/F
1	*509-302	3	Human Body in Health and Disease	Prereq: Program Admission; Coreq: 501-101	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/F
1	*501-107	2	Digital Literacy for Healthcare			S/F
1	*501-101	3	Medical Terminology	Prereq: 838-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/F
2	*509-305	2	Medical Assistant Lab Procedures 2	Prereq: Program Admission; 509-303; Coreq: 509-306		SU/S
2	*509-306	3	Medical Assistant Clinical Procedures 2	Prereq: Program Admission; 509-303; 509-304; Coreq: 509-305		SU/S
2	*509-307	2	Medical Office Insurance & Finance	Prereq: Program Admission; 501-107; 509-302		SU/S
2	*509-308	2	Pharm for Allied Health	Prereq: Program Admission; 509-302		SU/S
2	*509-309	2	Medical Law, Ethics and Professionalism	Prereq: Program Admission; Coreq: 801-301 OR 801-136		SU/S
2	801-301	1	Writing Principles	Prereq: 851-756	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/S
2	*509-310	3	Medical Assistant Practicum	Prereq: 509-301; Program Admission; Instructor Consent; Coreq: 509-305; 306; 307; 308; 309	• This course is a 160-hour unpaid practicum experience that must be completed in order for students to successfully complete the MA program. In order to enroll in the practicum course, students must complete all other coursework, submit a completed health physical form and submit evidence of completion of courses 531-800 CPR-Healthcare Provider and 531-817 Heartsaver First Aid.	SU/S

Minimum Program Total Credits Required: 32

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Medical Assistant (31-509-1)

The *Medical Assistant* program's goal is to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Medical assistants are multi-skilled health individuals who work in ambulatory settings such as clinics, group practices, and physicians' offices. The medical assistant is responsible for medical and surgical asepsis, taking vital signs, assisting the physician with examinations and surgery, administering ECGs and administering medications. The business/ administrative duties include patient reception, appointment making, record keeping, filing, bookkeeping, processing insurance claims, typing medical correspondence, transcription and microcomputer applications. Laboratory functions include specimen collection, performance of waived laboratory tests and work. Graduates find jobs as medical assistants, secretaries, medical laboratory assistants, phlebotomists, receptionists, medical insurance clerks and electrocardiogram technicians.

Program Learning Outcomes

Graduates will be able to:

1. Perform medical office administrative functions
2. Provide patient care in accordance with regulations, policies, laws, and patient rights.
3. Perform medical laboratory procedures
4. Demonstrate professionalism in a healthcare setting
5. Demonstrate safety and emergency practices in a healthcare setting

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Prior to registration in core program courses students must complete a background disclosure form and criminal background check.
4. 4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1. Minimum 32 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
2. There is a daily long-term exposure to latex products in this program. Those with latex sensitivity may find exp. to latex impossible to avoid in this environment.
3. When there has been any interruption between 509-305/509-306 and 509-310, the student must enroll in and complete 509-433 Medical Assisting Re-Entry Assessment prior to taking 509-310. 509-433 Medical Assisting Re-Entry Assessment must also be taken if there has been 1 year or more interruption between 509-303/509-304 and 509-305/509-306.
4. Persons convicted of a felony are not eligible to sit for the certification exam unless the certifying board grants a waiver based on the mitigating circumstances listed in the Disciplinary Standards of the American Association of Medical Assistants.
5. Students should be advised that they will be assigned a clinical site affiliated with the campus where they have completed 509-305 and 509-306. Reassignment of clinical sites is subject to instructor approval.
6. Admitted students must order a background check and complete a background information disclosure (BID). Additional details regarding these requirements can be found under Admission Requirements on the Medical Assistant Program Page.

Accreditation Statement

Gateway Technical College's Medical Assistant program is accredited by the Commission on Accreditation of Allied Health Programs (CAAHEP) (www.caahep.org) upon recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North, Suite 158
Clearwater, FL 33763
(727) 210-2350
https://www.caahep.org

Additional information on the Medical Assisting profession can be accessed at:
www.aama-ntl.org

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Health

Medical Assistant (31-509-1)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/medical-assistant. Please see your academic advisor for additional information.

O=Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq- with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	SU/S
1	*509-301	2	Medical Assistant Admin Procedures	Prereq: Program Admission; Coreq: 501-107		SU/S
1	*509-302	3	Human Body in Health and Disease	Prereq: Program Admission; Coreq: 501-101	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU/S
1	*501-107	2	Digital Literacy for Healthcare			SU/S
1	*501-101	3	Medical Terminology	Prereq: 838-105	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/S
2	*509-307	2	Medical Office Insurance & Finance	Prereq: Program Admission; 501-107; 509-302		F/SU
2	*509-308	2	Pharm for Allied Health	Prereq: Program Admission; 509-302		F/SU
2	*509-309	2	Medical Law, Ethics and Professionalism	Prereq: Program Admission; Coreq: 801-301 OR 801-136		F/SU
2	801-301	1	Writing Principles	Prereq: 851-756	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/SU
3	*509-303	2	Medical Assistant Lab Procedures 1	Prereq: Program Admission; Coreq: 509-304		S/F
3	*509-304	4	Medical Assistant Clinical Procedures 1	Prereq: Program Admission; Coreq: 509-303		S/F
4	*509-305	2	Medical Assistant Lab Procedures 2	Prereq: Program Admission; 509-303;Coreq: 509-306		SU/S
4	*509-306	3	Medical Assistant Clinical Procedures 2	Prereq: Program Admission; 509-303; 509-304; Coreq: 509-305		SU/S
4	*509-310	3	Medical Assistant Practicum	Prereq: 509-301; Program Admission; Instructor Consent; Coreq: 509-305; 306; 307; 308; 309	• This course is a 160-hour unpaid practicum experience that must be completed in order for students to successfully complete the MA program. In order to enroll in the practicum course, students must complete all other coursework, submit a completed health physical form and submit evidence of completion of courses 531-800 CPR-Healthcare Provider and 531-817 Heartsaver First Aid.	SU/S

Minimum Program Total Credits Required: 32

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Medical Assistant (31-509-1)

The *Medical Assistant* program's goal is to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Medical assistants are multi-skilled health individuals who work in ambulatory settings such as clinics, group practices, and physicians' offices. The medical assistant is responsible for medical and surgical asepsis, taking vital signs, assisting the physician with examinations and surgery, administering ECGs and administering medications. The business/ administrative duties include patient reception, appointment making, record keeping, filing, bookkeeping, processing insurance claims, typing medical correspondence, transcription and microcomputer applications. Laboratory functions include specimen collection, performance of waived laboratory tests and work. Graduates find jobs as medical assistants, secretaries, medical laboratory assistants, phlebotomists, receptionists, medical insurance clerks and electrocardiogram technicians.

Program Learning Outcomes

Graduates will be able to:

1 Perform medical office administrative functions
2 Provide patient care in accordance with regulations, policies, laws, and patient rights.
3 Perform medical laboratory procedures
4 Demonstrate professionalism in a healthcare setting
5 Demonstrate safety and emergency practices in a healthcare setting

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3 Prior to registration in core program courses students must complete a background disclosure form and criminal background check.
4 4. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1 Minimum 32 credits with a cumulative GPA of 2.0 or above.
2 *Minimum of 2.0 ("C") or above for these major courses.
3 Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1 Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
2 There is a daily long-term exposure to latex products in this program. Those with latex sensitivity may find exp. to latex impossible to avoid in this environment.
3 When there has been any interruption between 509-305/509-306 and 509-310, the student must enroll in and complete 509-433 Medical Assisting Re-Entry Assessment prior to taking 509-310. 509-433 Medical Assisting Re-Entry Assessment must also be taken if there has been 1 year or more interruption between 509-303/509-304 and 509-305/509-306.
4 Persons convicted of a felony are not eligible to sit for the certification exam unless the certifying board grants a waiver based on the mitigating circumstances listed in the Disciplinary Standards of the American Association of Medical Assistants.
5 Students should be advised that they will be assigned a clinical site affiliated with the campus where they have completed 509-305 and 509-306. Reassignment of clinical sites is subject to instructor approval.
6 Admitted students must order a background check and complete a background information disclosure (BID). Additional details regarding these requirements can be found under Admission Requirements on the Medical Assistant Program Page.

Accreditation Statement

Gateway Technical College's Medical Assistant program is accredited by the Commission on Accreditation of Allied Health Programs (CAAHEP) (www.caahep.org) upon recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North, Suite 158
Clearwater, FL 33763
(727) 210-2350
https://www.caahep.org

Additional information on the Medical Assisting profession can be accessed at:
www.aama-ntl.org

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Nursing Assistant (30-543-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/nursing-assistant. Please see your academic advisor for additional information.

K-D = Kenosha/days, K-E = Kenosha/evenings, R-D = Racine/days, R-E = Racine/evenings, E-D = Elkhorn/days, E-E = Elkhorn/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	K-D	K-E	R-D	R-E	E-D	E-E
1	*543-300	2	Nursing Assistant	Prereq: Program Admission	F/S/SU	F/S/SU	F/S/SU	F/S/SU	F/S/SU	F/S/SU
Minimum Program Total Credits Required: 2										

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Nursing Assistant (30-543-1)

Nursing Assistant, offered numerous times throughout the district, prepares students to perform basic nursing skills in caring for clients in various health care settings. A certificate is awarded upon successful completion of this course and graduates are eligible to competency test for placement on the Wisconsin Nursing Assistant / Home Health Aide Registry.

Program Learning Outcomes

Graduates will be able to:

1 Communicate effectively with clients, family, and co-workers
2 Protect rights of clients
3 Demonstrate ethical and legal responsibilities
4 Work cooperatively in a team environment
5 Provide holistic, safe care to diverse populations
6 Demonstrate reporting and documentation
7 Assist clients with rehabilitation and restorative care
8 Provide safe care for clients with acute and chronic health conditions
9 Complete educational requirements for the WI NA competency evaluation

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Admission Requirements

1 Students must submit an application and pay $30 fee.
2 Students must complete reading placement assessment with a min. score of 237; or minimum cumulative high school GPA of 2.6 (unweighted); or earned at least 12 college credits with a minimum GPA of 2.0.
3 Students must complete a Background Disclosure form and must request and pay for a background check. Applicants for all health science programs are subject to a review of their criminal backgrounds. Positive background checks may negatively impact your ability to pursue a health career at Gateway Technical College. Each case will be individually evaluated based on all available evidence provided to the college.
4 Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.

Graduation Requirements

1 *Minimum of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1 Clinical sites may require drug testing.
2 Successful completion of 543-300 will result in the student's eligibility to take the Wisconsin Competency Testing for certification as a Nursing Assistant.
3 Certificates will be issued upon successful completion of 543-300.
4 543-300 is a 75-hour course – classroom / lab / clinical combined.
5 District-wide Nursing Assistant clinical uniform required: Navy Blue uniform top and blue uniform bottom.
6 Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Documentation Manager, and/or Drug Testing.

The State of Wisconsin Regulatory Agency and the Federal Government requires mandatory attendance of 75 hours for this course. **With official documentation of medical and/or emergency reasoning, there is an allowance of up to 8 hours absence/tardiness with documented homework or alternative lab experiences, determined by the instructor.** Failure to complete the mandatory homework or lab experiences satisfactory will result in the student being dismissed from the program. All events of tardiness are rounded up to the next quarter hour. Clinical attendance of 16 hours is mandatory. No tardies or absences are allowed for clinical without an official document of medical or emergency issue. If there is a college-related cancellation of course time, mandatory make-up day(s) will be assigned to the course to ensure compliance with state regulations.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Office Assistant (31-106-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/office-assistant. Please see your academic advisor for additional information.

O = Online, F=Fall, S=Spring

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*106-021	3	Business Office Fundamentals			F
1	*106-028	3	Office Technologies Essentials			F
1	*106-137	3	Keyboarding Applications		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
1	801-196	3	Oral/Interpersonal Communication			F
2	*106-019	1	Admin. Services Internship I	Prereq: Instructor Consent; 106-137 Coreq: 106-024; 804-134 OR 804-135; 801-136		S
2	*106-024	3	Professionalism in Business			S
2	*106-025	3	Spreadsheets for Business	Prereq: 106-137		S
2	*106-026	3	Business Publications	Prereq: 106-137		S
2	*106-030	3	Word Processing for Business	Prereq: 106-137		S
2	804-134	3	Mathematics Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S

Minimum Program Total Credits Required: 32

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-106-6 Administrative Professional program can earn their associate degree by completing an additional 28 credits. Please see your academic advisor for details.

Office Assistant (31-106-1)

Office Assistant prepares individuals to fulfill the role of an office generalist. Participants will develop skills in keyboarding, filing, business mathematics, records control, and customer service. Office Assistant graduates will develop the computer skills necessary to succeed in the office environment. Participants will be given the opportunity to visit and observe area office assistants in action.

Program Learning Outcomes

Graduates will be able to:

1. Perform accurate workplace communications.
2. Use technology skills for business tasks.
3. Perform routine office procedures.
4. Demonstrate professionalism and effective workplace relationships.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 32 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Business and Transportation

Office Assistant (31-106-1)

Technical Diploma

Effective 2026/2027

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O = Online, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	O
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F
1	*106-137	3	Keyboarding Applications		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F
1	801-136	3	English Composition 1	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F
2	*106-026	3	Business Publications	Prereq: 106-137		S
2	*106-030	3	Word Processing for Business	Prereq: 106-137		S
2	804-134	3	Mathematical Reasoning	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
3	*106-021	3	Business Office Fundamentals			SU
3	*106-028	3	Office Technologies Essentials			SU
3	801-196	3	Oral/Interpersonal Communication			SU
4	*106-019	1	Admin. Services Internship I	Prereq: Instructor Consent; 106-137; Coreq: 106-024; 804-134 OR 804-135; 801-136		F
4	*106-024	3	Professionalism in Business			F
4	*106-025	3	Spreadsheets for Business	Prereq: 106-137		F

Minimum Program Total Credits Required: 32

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 10-106-6 Administrative Professional program can earn their associate degree by completing an additional 28 credits. Please see your academic advisor for details.

Office Assistant (31-106-1)

Office Assistant prepares individuals to fulfill the role of an office generalist. Participants will develop skills in keyboarding, filing, business mathematics, records control, and customer service. Office Assistant graduates will develop the computer skills necessary to succeed in the office environment. Participants will be given the opportunity to visit and observe area office assistants in action.

Program Learning Outcomes

Graduates will be able to:

1. Perform accurate workplace communications.
2. Use technology skills for business tasks.
3. Perform routine office procedures.
4. Demonstrate professionalism and effective workplace relationships.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 32 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Practical Nursing (31-543-1)

Technical Diploma

Effective 2026/2027

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R-D = Racine/days, E-D = Elkhorn/days, S=Spring, SU=Summer, F=Fall

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	R-D	E-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU	SU/F/S
1	801-136	3	English Composition	Prereq: 831-103 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details	F/S/SU	SU/F/S
1	806-177	4	General Anatomy and Physiology	Prereq: 838-105 OR 851-757 OR 831-107	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details	F/S/SU	SU/F/S
1	809-188	3	Psychology, Developmental	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details	F/S/SU	SU/F/S
2	*543-301	2	Nursing Fundamentals	Prereq: Program Admission; Advisor Consent; 806-177 Coreq: 801-136	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must receive a ("B-") or better in 806-177 General Anatomy & Physiology before they can enroll in this course.	F/S/SU	F
2	*543-302	3	Nursing Skills	Prereq: Program Admission; Advisor Consent; 806-177 Coreq: 543-301	• Students must receive a ("B-") or better in 806-177 General Anatomy & Physiology before they can enroll in this course.	F/S/SU	F
2	*543-303	2	Nursing Pharmacology	Prereq: Program Admission; Advisor Consent; 806-177 Coreq: 543-301; 543-302	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Students must receive a ("B-") or better in 806-177 General Anatomy & Physiology before they can enroll in this course.	F/S/SU	F
2	*543-304	2	Nsg: Intro Clinical Practice	Prereq: Program Admission; Advisor Consent; 806-177; Coreq: 543-301; 543-302; 543-303	• Students must receive a ("B-") or better in 806-177 General Anatomy & Physiology before they can enroll in this course. • Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.	F/S/SU	F
3	*543-305	3	Nursing Health Alterations	Prereq: Program Admission; 543-301; 543-302; 543-303; 543-304; 801-136; Coreq: 543-306; 543-307		F/S/SU	S
3	*543-306	3	Nursing Health Promotion	Prereq: Program Admission; 543-301; 543-302; 543-303; 543-304; 809-188; 801-136		F/S/SU	S
3	*543-307	2	Nsg: Clin Care Across Lifespan	Prereq: Program Admission; 543-301; 543-302; 543-303; 543-304; 809-188; 801-136 Coreq: 543-306	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.	F/S/SU	S
3	*543-308	2	Nsg: Intro Clinical Care Mgt	Prereq: Program Admission; 543-301; 543-302; 543-303; 543-304; Coreq: 543-305; 543-306; 543-307	• Health requirements must be met prior to admission to clinical courses, to include, but not limited to, a physical exam, immunizations, and TB testing.	F/S/SU	S

Minimum Program Total Credits Required: 30

(*) Students must achieve a minimum of 2.0 ("C") or above for this major course to meet graduation requirements.

Practical Nursing (31-543-1)

The Practical Nurse (PN) program prepares graduates to provide basic hands-on nursing care needed by patients in variety of health care settings. LPN's assist with data collection, develop and revise nursing care plans, reinforce teaching provided by RN's or other appropriate health care personnel, and participate as a member of the health care team in meeting basic client needs.

This is an excellent career for people who enjoy working with people and caring for individuals with physical or emotional concerns. Students must be willing to learn, have effective communication and interpersonal skills, and have an interest in health care as a career.

Program Learning Outcomes

Graduates will be able to:

1. Integrate Practical Nursing identity reflecting integrity, responsibility, and nursing.
2. Communicate basic information using multiple sources in nursing practice.
3. Utilize theoretical knowledge to participate in decision making
4. Apply the nursing process to basic client care across diverse populations.
5. Function as a healthcare team member to provide safe and effective care.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check and official high school, GED or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 30 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.
4. Gateway credits may transfer to colleges and universities offering adv. nurse ed. programs.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students must have completed 543-300 or equivalent of certified nursing assistant course prior to admission into program.
2. Please note that your program may require additional fee(s) for: Online e-modules, Learning and Program Technology Fees, Criminal Background Check, Medical Document Manager, and /or Drug Testing.
3. The core 543 nursing courses require students to have a laptop computer available for use in the classroom. The computer must meet minimum MS Windows laptop specifications - see your advisor for details.
4. The core 543 nursing courses can also be modified to take two courses per semester over a period of four semesters. This modified option will impact your ability to utilize financial aid. Please contact a student finance specialist in Student Services for more information.

Accreditation Statement

The Nursing program is fully accredited by the Accreditation Commission for Education in Nursing; 3390 Peachtree Rd NE Suite #1400, Atlanta, GA 30326. For more information, call (404) 975-5000.

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Full-Time Pathway to Success
School of Manufacturing, Engineering, and Information Technology

Refrigeration, Air Conditioning & Heating Service Technician (HVAC-R) (31-401-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/hvac. Please see your academic advisor for additional information.

K-D = Kenosha/days, E-D = Elkhorn/days F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-D	E-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F	F
1	*401-310	3	Air Condition Fundamentals	Coreq: 601-116 OR 401-316	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F	F
1	*401-316	3	Mechanical Fundamentals	Coreq: 601-110 OR 401-310	• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F	F
1	*401-304	3	HVAC Electricity/Electronics		• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F	F
1	*401-333	3	Refrigeration Fundamentals	Coreq: 601-110 OR 401-310; 601-116 OR 401-316	• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	F	F
2	*401-301	3	AC System Diagnosis & Repair	Prereq: 601-110 OR 401-310		S	S
2	*401-321	3	Heating Systems	Prereq: 601-110 OR 401-310		S	S
2	*401-328	3	Electrical Controls & Systems	Prereq: 601-304 OR 401-304 Coreq: 804-370		S	S
2	*401-329	3	HVAC Systems	Prereq: 601-110 OR 401-310; 601-116 OR 401-316		S	S
2	*804-370	2	Mathematics I/Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S	S
3	*401-331	3	Heating Systems Applications	Prereq: 601-121 OR 401-321	• Students who take 601-113 (Facility Operating Engineer LP) and 601-117 (Facility Operating Engineer HP) may omit this course.	SU	SU
3	*401-347	3	Control Circuit Applications	Prereq: 601-128 OR 401-328; 804-370		SU	SU
3	*401-345	3	Electronic Energy Management	Coreq: 601-147 OR 401-347		SU	SU
3	*401-343	3	Refrigeration Applications	Prereq: 601-110 OR 401-310; 601-116 OR 401-316; 601-133 OR 401-333	• Students who take 601-113 (Facility Operating Engineer LP) and 601-117 (Facility Operating Engineer HP) may omit this course.	SU	SU

Minimum Program Total Credits Required: 39

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Refrigeration, Air Conditioning and Heating Service Technician (HVAC-R) (31-401-1)

Refrigeration, Air Conditioning and Heating Technician develops the skills and knowledge necessary for state and federal certification. Theory and practical hands-on experience in the troubleshooting, repair, and installation of residential and commercial HVAC/R systems are emphasized. Students will practice on modern and advanced equipment, incorporating microprocessor controls, and building automation technology. Topics covered during lecture and lab hours include complete heating, air conditioning and refrigeration systems, how components interact, and total system performance. Refrigerant handling certification is encouraged and is dependent upon successful completion by the individual student.

Program Learning Outcomes

Graduates will be able to:

1. Install HVAC/R components
2. Service HVAC/R systems
3. Troubleshoot HVAC/R systems
4. Evaluate HVAC/R system designs

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 39 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription safety glasses are required, allow a minimum of 90 days.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Manufacturing, Engineering, and Information Technology

Refrigeration, Air Conditioning & Heating Service Technician (HVAC-R) (31-401-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/hvac. Please see your academic advisor for additional information.

K-E = Kenosha/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	K-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	S
1	*401-310	3	Air Condition Fundamentals	Coreq: 601-116 OR 401-316	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program. • Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	S
1	*401-316	3	Mechanical Fundamentals	Coreq: 601-110 OR 401-310	• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	S
1	*804-370	2	Mathematics I/Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S
2	*401-304	3	HVAC Electricity/Electronics		• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	SU
2	*401-333	3	Refrigeration Fundamentals	Coreq: 601-110 OR 401-310; 601-116 OR 401-316	• Registration is limited to program students with Core-Active Status and new program students with priority placement authorization. If there are seats available during the 14 days prior to the start of the course, contact academicadvising@gtc.edu to register.	SU
2	*401-321	3	Heating Systems	Prereq: 601-110 OR 401-310		SU
3	*401-301	3	AC System Diagnosis & Repair	Prereq: 601-110 OR 401-310		F
3	*401-328	3	Electrical Controls & Systems	Prereq: 601-304 OR 401-304 Coreq: 804-370		F
3	*401-329	3	HVAC Systems	Prereq: 601-110 OR 401-310; 601-116 OR 401-316		F
4	*401-331	3	Heating Systems Applications	Prereq: 601-121 OR 401-321	• Students who take 601-113 (Facility Operating Engineer LP) and 601-117 (Facility Operating Engineer HP) may omit this course.	S
4	*401-347	3	Control Circuit Applications	Prereq: 601-128 OR 401-328; 804-370		S
5	*401-345	3	Electronic Energy Management	Coreq: 601-147 OR 401-347		SU
5	*401-343	3	Refrigeration Applications	Prereq: 601-110 OR 401-310; 601-116 OR 401-316; 601-133 OR 401-333	• Students who take 601-113 (Facility Operating Engineer LP) and 601-117 (Facility Operating Engineer HP) may omit this course.	SU

Minimum Program Total Credits Required: 39

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Refrigeration, Air Conditioning and Heating Service Technician (HVAC-R) (31-401-1)

Refrigeration, Air Conditioning and Heating Technician develops the skills and knowledge necessary for state and federal certification. Theory and practical hands-on experience in the troubleshooting, repair, and installation of residential and commercial HVAC/R systems are emphasized. Students will practice on modern and advanced equipment, incorporating microprocessor controls, and building automation technology. Topics covered during lecture and lab hours include complete heating, air conditioning and refrigeration systems, how components interact, and total system performance. Refrigerant handling certification is encouraged and is dependent upon successful completion by the individual student.

Program Learning Outcomes

Graduates will be able to:

1. Install HVAC/R components
2. Service HVAC/R systems
3. Troubleshoot HVAC/R systems
4. Evaluate HVAC/R system designs

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 39 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription safety glasses are required, allow a minimum of 90 days.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success
School of Business and Transportation

Truck Driving (30-458-1)

Technical Diploma
Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/cdl. Please see your academic advisor for additional information.

HZ-D = Horizon Center/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq-before/ coreq-with)	Notes	HZ-D
1	*458-301	3	CDL & Inspection Law and Logistics	Prereq: Program Admission	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	*458-302	4	CDL License, Driving Skills, Safety	Prereq: 458-301	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU
1	*458-303	3	Continuous Improvement & Hazard Safety	Prereq: 458-302		F/S/SU

Minimum Program Total Credits Required: 10

(*) Students must achieve a combined average of 2.67 ("B-") or above for this major course to meet graduation requirements.

Truck Driving (30-458-1)

Professional truck drivers for local, regional, and over the road jobs are in high demand. Become part of this exciting industry. This 360-hour program covers all aspects from obtaining your Commercial Learner's Permit (CLP) to the opportunity to obtain your Commercial Driver's License (CDL). You will learn how to safely operate a tractor trailer, laws and regulations, maintenance, vehicle systems and safety.

Program Learning Outcomes

Graduates will be able to:

1. Perform basic truck driving operations.
2. Adhere to safe truck driving operating procedures.
3. Explain advanced operating practices.
4. Explain vehicle systems and reporting malfunctions.
5. Comply with non-driving activity activities.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 10 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.67 ("B-") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Participants must be 18 years of age or older.
2. Participants must be able to speak and read English.
3. Please note that your program may require additional fee(s) for; a Physical Examination, Drug Testing, and/or Class A Commercial Learner's Permit.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success
School of Protective and Human Services

Veterinary Assistant (31-098-3)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/veterinary-technician. Please see your academic advisor for additional information.

E-D = Elkhorn/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	E-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	S/SU
1	806-105	4	Principles of Animal Biology		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	S/SU
1	809-198	3	Psychology, Introduction to	Prereq: 838-105 OR 851-757	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	S/SU
2	*098-120	1	Animal Behavior	Prereq: Program Admission		SU/F
2	*098-123	2	Veterinary Medical Terminology	Prereq: Program Admission	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	SU/F
2	801-196 **OR** 801-198	3	Oral/Interpersonal Communication **OR** Speech			SU/F
3	*098-101	3	Animal Care and Management	Prereq: Instructor Consent; 806-105; Coreq: 091-102 OR 098-102	• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S
3	*098-102	3	Veterinary Business Practices	Coreq: 091-101 OR 098-101		F/S
4	*098-103	4	Clinical Pathology I for Vet Sciences	Prereq: 091-101 OR 098-101; 091-102 OR 098-102; 806-105	• Students must receive a “B” or better in 806-105 before they can enroll in this course.	S/SU
4	*098-105	3	Surgical Procedures I for Vet Sciences	Coreq: 091-103 OR 098-103		S/SU
4	*098-107	3	Imaging for Veterinary Sciences	Coreq: 091-103 OR 098-103		S/SU
5	*098-108	3	Veterinary Pharmacology	Prereq: 834-109; Coreq: 091-110 OR 098-110	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	SU/F
5	*098-110	2	Clinical Skills I for Vet Sciences	Prereq: Instructor Consent		SU/F

Minimum Program Total Credits Required: 35

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Veterinary Assistant (31-098-3)

In this program, students learn basic veterinary assistant skills including how to care for and handle animals, provide medical and surgical nursing, and perform radiography and clinical laboratory procedures. Applicable federal, state, and local law and ethical guidelines are presented to students throughout the program. Students complete clinical work under the direction of certified veterinary technicians and veterinarians. Upon completion of the program, graduates can provide professional support to veterinarians and veterinary technicians in veterinary clinics.

Program Learning Outcomes

Graduates will be able to:

1. Manage daily veterinary business functions.
2. Develop basic animal handling skills and husbandry needs.
3. Explore the concepts of surgical room and pre-surgical patient preparation.
4. Examine legal issues and pharmacy skills for a Veterinary Assistant.
5. Investigate basic diagnostic laboratory and radiology skills.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.
3. Review the technical standards for this program at www.gtc.edu/forms. An acknowledgement of these standards will be completed within the online application.
4. This is a high demand program that utilizes a priority placement process for enrollment in core program courses. Students admitted into this program progress through three stages pre-core, core-ready and core-active as they work to complete their degree. Students are selected based on application date, completion of academic preparedness requirements and district residency. Academic preparedness requirements may include a Background Information Disclosure Form and Criminal Background Check and official high school, GED or HSED transcript including a graduation or passing date.

Graduation Requirements

1. Minimum 35 credits with a cumulative GPA of 2.0 or above.
2. *Minimum of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Students must maintain minimum course grades of "C" or better for all courses marked with an (*) to remain in the program.
2. A laptop computer, stethoscope, uniform, and other supplies will be needed.
3. Nearly daily exposure to latex and/or animal fur and dander will occur in this program. Those with sensitivities may find exposure impossible to avoid.
4. Immunocompromised individuals should consult their physician before enrollment.
5. Clinical sites are located throughout and potentially outside the district. Students are responsible for their own transportation.
6. Some clinical sites require TB testing and immunizations against tetanus and hepatitis B. Rabies immunization is required.
7. Please note that your program may require additional fee(s) for: Criminal Background Check, Medical Document Manager, and/or Drug Testing.
8. This is a high demand program that utilizes a priority placement process for enrollment in core program courses.
9. Students admitted to the program must complete a volunteer shadowing experience in an approved clinical setting prior to registering for a Veterinary Technician course. Documentation requirements will be included in the program admission packet. This is a high demand program with petitioning required. See the program adviser for details.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Welding (31-442-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/welding. Please see your academic advisor for additional information.

E-D = Elkhorn/days, R-D = Racine/days, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	E-D	R-D
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU	F/S/SU
1	*442-321	3	Welding / Gas Metal Arc Welding			F/S/SU	F/S/SU
1	*442-322	3	Welding / Shielded Metal Arc Welding			F/S/SU	F/S/SU
1	*442-323	3	Welding / Gas Tungsten Arc Welding			F/S/SU	F/S/SU
1	*442-334	3	Welding/Thermal Cutting			F/S/SU	F/S/SU
1	804-370	2	Mathematics I / Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.	F/S/SU	F/S/SU
2	*442-324	2	Weld Printreading & Fab. Procedures			F/S/SU	F/S/SU
2	*457-309	2	Metal Fabrication I		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU	F/S/SU
2	*442-330	3	Welding / Adv. Shielded Metal Arc Welding	Prereq: 442-322		F/S/SU	F/S/SU
2	*442-332	3	Welding / Adv. Gas Metal Arc Welding	Prereq: 442-321		F/S/SU	F/S/SU
2	*442-333	3	Welding / Adv. Gas Tungsten Arc Welding	Prereq: 442-323		F/S/SU	F/S/SU
3	*457-336	3	Metal Fabrication II	Prereq: 457-309; 442-324; 442-321; 442-322 or 442-323		F/S/SU	F/S/SU
3	*457-337	3	Metal Fabrication III	Prereq: 804-370; Coreq: 457-336		F/S/SU	F/S/SU
3	*442-308 **OR** *442-318	3	Welding / Pipe Shield Metal Arc Welding **OR** Structural Gas Metal Arc Welding	Prereq: 442-321 **OR** Prereq: 442-321; 442-332		F/S/SU	F/S/SU
3	*442-307 **OR** *442-317	3	Welding / Pipe Gas Tungsten Arc Welding **OR** Structural Flux Cored Arc Welding	Prereq: 442-322; 442-323 **OR** Prereq: 442-321; 442-332		F/S/SU	F/S/SU
3	*442-306 **OR** *442-316	3	Welding / Pipe Gas Metal Arc Welding **OR** Structural Shielded Metal Arc Welding	Prereq: 442-321 **OR** Prereq: 442-322; 442-330		F/S/SU	F/S/SU

Minimum Program Total Credits Required: 43

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Welding (31-442-1)

Welding provides concentrated instruction, primarily through practical experience, on various welding techniques. The following processes are covered Welding/Thermal Cutting, brazing, and cutting; GMAW-gas metal arc welding (wire, MIG, short circuit); GTAW-gas tungsten arc welding (TIG, heliarc); and SMAW-shielded metal arc welding (stick, arc), including robotic welding, pipe welding and cutting.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate Industry recognized safety practices.
2. Interpret molding drawings.
3. Produce shielded metal arc welds (SMAW).
4. Produce gas metal arc welds (GMAW).
5. Produce flux cored welds (FCAW).
6. Produce gas tungsten arc welds (GTAW).
7. Perform cutting operations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 43 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.
2. Students are required to have an arc welding helmet, oxy-acet goggles, welding gloves (leather), pliers, and tape measure. Students must be prepared to bring their own equipment.
3. Welding PPE kits are available at the campus bookstore.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Welding (31-442-1)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/welding. Please see your academic advisor for additional information.

E-D = Elkhorn/days, E-E = Elkhorn/evenings, R-D = Racine/days, R-E = Racine/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	**Requisites** (prereq- before/ coreq-with)	Notes	E-D	E-E	R-D	R-E
1	890-155	1	Gateway to Success (G2S)		• Students are required to take this course in their first semester of enrollment. Please see an advisor for details.	F/S/SU	F/S/SU	F/S/SU	F/S/SU
1	*442-334	3	Welding/Thermal Cutting			F/S/SU	F/S/SU	F/S/SU	F/S/SU
1	*442-322	3	Welding / Shielded Metal Arc Welding			F/S/SU	F/S/SU	F/S/SU	F/S/SU
1	804-370	2	Mathematics I / Applied	Prereq: 854-760	• Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details	F/S/SU	F/S/SU	F/S/SU	F/S/SU
2	*442-323	3	Welding / Gas Tungsten Arc Welding			F/S/SU	F/S/SU	F/S/SU	F/S/SU
2	*442-324	2	Weld Printreading & Fab. Procedures			F/S/SU	F/S/SU	F/S/SU	F/S/SU
2	*442-321	3	Welding / Gas Metal Arc Welding			F/S/SU	F/S/SU	F/S/SU	F/S/SU
2	*457-309	2	Metal Fabrication I		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU	F/S/SU	F/S/SU	F/S/SU
3	*442-330	3	Welding / Adv. Shielded Metal Arc Welding	Prereq: 442-322		F/S/SU	F/S/SU	F/S/SU	F/S/SU
3	*442-332	3	Welding / Adv. Gas Metal Arc Welding	Prereq: 442-321		F/S/SU	F/S/SU	F/S/SU	F/S/SU
3	*442-333	3	Welding / Adv. Gas Tungsten Arc Welding	Prereq: 442-323		F/S/SU	F/S/SU	F/S/SU	F/S/SU
4	*457-336	3	Metal Fabrication II	Prereq: 457-309; 442-324; 442-321; 442-322 or 442-323		F/S/SU	F/S/SU	F/S/SU	F/S/SU
4	*457-337	3	Metal Fabrication III	Prereq: 804-370; Coreq: 457-336		F/S/SU	F/S/SU	F/S/SU	F/S/SU
4	*442-308 **OR** *442-318	3	Welding / Pipe Shield Metal Arc Welding **OR** Structural Gas Metal Arc Welding	Prereq: 442-321 **OR** Prereq: 442-321; 442-332		F/S/SU	F/S/SU	F/S/SU	F/S/SU
5	*442-307 **OR** *442-317	3	Welding / Pipe Gas Tungsten Arc Welding **OR** Structural Flux Cored Arc Welding	Prereq: 442-322; 442-323 **OR** Prereq: 442-321; 442-332		F/S/SU	F/S/SU	F/S/SU	F/S/SU
5	*442-306 **OR** *442-316	3	Welding / Pipe Gas Metal Arc Welding **OR** Structural Shielded Metal Arc Welding	Prereq: 442-321 **OR** Prereq: 442-322; 442-330		F/S/SU	F/S/SU	F/S/SU	F/S/SU

Minimum Program Total Credits Required: 43

(*) Students must achieve a combined average of 2.0 ("C") or above for this major course to meet graduation requirements.

Welding (31-442-1)

Welding provides concentrated instruction, primarily through practical experience, on various welding techniques. The following processes are covered Welding/Thermal Cutting, brazing, and cutting; GMAW-gas metal arc welding (wire, MIG, short circuit); GTAW-gas tungsten arc welding (TIG, heliarc); and SMAW-shielded metal arc welding (stick, arc), including robotic welding, pipe welding and cutting.

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate Industry recognized safety practices.
2. Interpret molding drawings.
3. Produce shielded metal arc welds (SMAW).
4. Produce gas metal arc welds (GMAW).
5. Produce flux cored welds (FCAW).
6. Produce gas tungsten arc welds (GTAW).
7. Perform cutting operations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 43 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.
2. Students are required to have an arc welding helmet, oxy-acet goggles, welding gloves (leather), pliers, and tape measure. Students must be prepared to bring their own equipment.
3. Welding PPE kits are available at the campus bookstore.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Welding/Maintenance & Fabrication (30-442-2)

Technical Diploma

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at https://www.gtc.edu/construction. Please see your academic advisor for additional information.

E-D = Elkhorn/days, R-D = Racine/days, E-E = Elkhorn/evenings, R-E = Racine/evenings, F=Fall, S=Spring, SU=Summer

Term	Course Number	Credits	Course Title	Requisites (prereq-before/ coreq-with)	Notes	E-D	R-D	E-E	R-E
1	*442-321	3	Welding / Gas Metal Arc Welding			F/S/SU	F/S/SU	F/S/SU	F/S/SU
1	*442-322	3	Welding / Shielded Metal Arc Welding			F/S/SU	F/S/SU	F/S/SU	F/S/SU
1	*442-323	3	Welding / Gas Tungsten Arc Welding			F/S/SU	F/S/SU	F/S/SU	F/S/SU
2	*442-324	2	Weld Printreading & Fab. Procedures			F/S/SU	F/S/SU	F/S/SU	F/S/SU
2	*442-334	3	Welding/Thermal Cutting			F/S/SU	F/S/SU	F/S/SU	F/S/SU
2	*457-309	2	Metal Fabrication I		• Faculty have identified this milestone course as providing a strong foundation for success throughout the program.	F/S/SU	F/S/SU	F/S/SU	F/S/SU

Minimum Program Total Credits Required: 16

(*) Students must achieve a combined average of 2.0 (“C”) or above for this major course to meet graduation requirements.

Students interested in continuing into the 31-442-1 Welding program can earn their technical diploma by completing an additional 27 credits. Please see your academic advisor for details..

Welding/Maintenance & Fabrication (30-442-2)

Welding/Maintenance & Fabrication provides concentrated instruction, primarily through practical experience, on various welding techniques. The following processes are covered: Welding/Thermal Cutting; GMAW-gas metal arc welding (wire, MIG, short circuit); GTAW-gas tungsten arc welding (TIG, heliarc); and SMAW-shielded metal arc welding (stick, arc).

Program Learning Outcomes

Graduates will be able to:

1. Demonstrate industry-recognized safety practices.
2. Interpret welding drawings.
3. Produce shielded metal arc welds (SMAW).
4. Produce gas metal arc welds (GMAW).
5. Perform cutting operations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 16 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements, check the Student Handbook or Graduation Requirements.

Notes

1. Safety glasses are required in labs. If prescription glasses are required, allow a minimum of 90 days before the program start to obtain prescription and glasses.
2. Students are required to have an arc welding helmet, oxy-acet goggles, welding gloves (leather), pliers, and tape measure. Students must be prepared to bring their own equipment.
3. Welding PPE kits are available at the campus bookstore.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Pathway to Success

Arborist Apprentice (50-001-1)

Effective 2026/2027

Program Description

Urban forestry combines the science of arboriculture with urban tree management strategies, emphasizing the practical disciplines related to tree planting; tree care and protection, and the retention of a healthy urban tree population for the benefits the trees provide to the community. The urban environment can present many arboricultural challenges such as limited root and canopy space, poor soil quality, deficiency or excess of water and light, heat, pollution, mechanical and chemical damage to trees, and mitigation of tree-related hazards. In this occupation and trade, arborists utilize the science of Arboriculture to manage trees planted in and around human occupied areas. Arborists are individuals trained in the art and science of planting, pruning, and the overall caring for, and maintenance of individual trees. They perform the related job duties and tasks associated with maintaining a viable and safe urban tree population managed by private homeowners and their trees, and urban foresters who manage city tree populations.

Program Learning Outcomes

Graduates will be able to:

1 Adhere to safe work practices.
2 Operate equipment.
3 Maintain equipment.
4 Prune trees and shrubs.
5 Remove trees and shrubs.
6 Establish trees and shrubs.
7 Assess trees to mitigate risks.
8 Apply plant healthcare treatments.
9 Demonstrate core ability skills required for the trade.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Get Started as an Apprentice

1 You should apply directly to employers, and entry requirement vary by employer.
2 If you need assistance finding an employer who will take you on as an apprentice, don't hesitate to get in touch with the local WI DWD-BAS Apprenticeship Training Representative at 414.216.8417 to find an employer who has been approved to train apprentices. You can also find apprenticeship employers at https://dwd.wisconsin.gov/apprenticeship/ra/applicants.htm.
3 Once your contract is in place with your employer and WI DWD-BAS, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.
4 You can contact Gateway's Apprenticeship department at apprenticeship@gtc.edu or 262.564.2954.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1 Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and, the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2 Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3 Students must complete all courses with a grade of "C" or better.
4 Students must have a valid driver's license and pass an aptitude test.
5 Arborists work outdoors in all kinds of weather for extended periods of time. The work is physically demanding and requires dangerous equipment such as chainsaws. Moreover, the work is often performed at heights, so arborists use fall-protection gear in addition to personal protective equipment.
6 Textbook supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
7 Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.
8 Upon completion of the Arborist Apprenticeship program, a student will qualify to sit the International Society of Arboriculture (ISA) certified arborist exam.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Pathway to Success

Arborist Apprentice (50-001-1)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/arborist-apprentice**. Please see your academic advisor for additional information.*

Course Number	Course Name	Requisites	Credits	Hours
*001-133	Chainsaw Safety and Operation		2.0	54
*001-124	Fundamentals of Aerial Tree Work		2.0	54
*001-173	Urban Tree Maintenance		2.0	54
*001-118	Landscape Plant Identification		2.0	54
*001-156	Tree Care Practicum 1	**Pre:** 001-124	2.0	72
*001-189	Plant Health Care & Treatments		2.0	54
*001-110	Tree Growth & Development	**Pre:** 001-118; 001-133; 001-173; 001-189	2.0	54
*001-191	Leadership & Teamwork in Tree Care	**Pre:** 001-118; 001-124; 001-133; 001-156; 001-173; 001-189	1.0	36
*455-455	Transition to Trainer		.20	8

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 3 years
- On the job time – 5400 Hours
- Related Instruction Time – 440 Hours
- Additional training – First Aid & CPR Certifications; State of WI Pesticide Applicator; ISA Certified Arborist Credential
  Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/arborist.htm

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Barbering Apprentice (50-502-5)

Effective 2026/2027

Program Description

Barbers focus on providing hair and shaving services to enhance clients' appearance. Those who operate their own barbering establishments may have managerial duties that include: hiring and supervising employees; keeping business records; maintaining licenses, permits and insurance; controlling inventory and ordering supplies, and developing marketing plans. Barbers cut, trim, shampoo, and style hair, mostly for male clients. They also may fit hairpieces and offer facial shaving. In every state, barbers are licensed to color, bleach, and highlight hair and to offer permanent-wave services. Common tools include combs, scissors, razors, and clippers. "Barbering" means, for compensation, arranging, styling, dressing, shampooing, cleansing, curling, dyeing, tinting, coloring, bleaching, waving, cutting, shaving, trimming, relaxing, or performing similar work upon the hair of the head, neck, or face of any person by any means.

Program Learning Outcomes

Graduates will be able to:

1. Apply safety and infection control procedures.
2. Identify hair and scalp disorders.
3. Perform haircutting services.
4. Demonstrate shaving and other facial hair removal techniques.
5. Perform male facial procedures.
6. Perform texture services.
7. Perform hair color services.
8. Demonstrate hair styling and finishing techniques.
9. Adhere to the current Wisconsin administrative codes and statutes for barbers.
10. Demonstrate interpersonal skills for success.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Get Started as a Barber Apprentice

1. To begin identifying or planning your apprenticeship, contact the local Apprenticeship Training Representative at 414.216.8417
2. If an employer wishes to hire you, they will submit an apprentice application to the Wisconsin Department of Workforce Development (DWD). If the DWD determines that you meet the Bureau of Apprentice Standards qualifications, you will be given a credential notice.
3. You and your employer will submit the credential notice, the Apprentice Application (Form #1488) and fee ($10.00) to the Department of Safety and Professional Services, P.O. Box 8935, Madison, WI 53708-8935.
4. The Department of Safety and Professional Services will issue the apprentice permit after the application is approved. You may begin to work after your permit is issued. Your permit will be valid for three (3) years.
5. Once your permit is in place, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1. You must be in good physical health and able to stand for long periods of time, possess finger dexterity, a sense of form and artistry and be able to work well with the public.
2. Entry requirements vary by employer. High school diploma or equivalent is recommended.
3. Applicants apply directly to a licensed, full service salon. The salon must be in business for at least one year.
4. Students must complete all courses with a grade of "C" or better.
5. Textbook, supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
6. Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

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Barbering Apprentice (50-502-5)

Effective 2026/2027

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Term	Course Number	Course Name	Credits	Hours
1	*502-596	Shampooing, Trichology & Hairstyling for Barber Apprenticeship	2	72
2	*502-597	Barber Professional Development, Skin Disorders, Shaving and Male Facials, and Hair Cutting for Barber Apprenticeship	2	72
3	*502-598	Barber Laws, Infection Control, and Chemical Texture Services for Barber Apprenticeship	2	72
4	*502-599	Hair Color, Lightening, Interpersonal Skills and State Codes for Barber Apprenticeship	2	72

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 1 year
- On the job time – 1712 Hours
- Related Instruction Time – 288 Hours
- Additional training – Apprentice permit from the WI Department of Safety and Professional Services, Transition to Trainer
- Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/barber.htm

NOTES

- Apprenticeship textbooks are obtained through an offsite vendor.
- Contact Pivot Point International representative, Matt Kyle, at mkyle@pivot-point.com or call 847-866-0500, Ext. 7372 for more information.
- Black scrubs are required for this apprenticeship program. If you have any questions, please contact the Apprenticeship Department.

If you need assistance getting started
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Pathway to Success

Construction Electrical Apprentice (50-413-2)

Effective 2026/2027

Program Description

This program helps prepare apprentices to become electricians. Related instruction is intended to support on-the-job learning through an employer or trade, and the learning outcomes listed for this program align with identified work processes and external standards. Electricians plan, diagram, install, and repair electrical fixtures, apparatus, and control equipment such as switches, relays, and circuit breaker panels. They measure, cut, bend, thread, assemble, and install electrical conduit (pipe or tubing), and pull wire through conduit. They test continuity of circuits to ensure compatibility and safety of components, using instruments; such as the ohmmeter, megger, and other testing equipment. Electricians assemble, install, and wire electrical systems that operate heating, lighting, power, air conditioning, and refrigeration components; electrical machinery; electronic equipment and controls; and signal and communication systems. For safety, electricians must also become familiar with the National Electrical Code, designed to protect persons and property from hazards arising from the use of electricity.

Program Learning Outcomes

Graduates will be able to:

1 Apply AC and DC theory.
2 Apply electrical code requirements.
3 Apply operational principles to transformer installations.
4 Examine electric motor theory and applications.
5 Apply electric motor control theory and applications.
6 Analyze variable speed drives.
7 Interpret electrical and equipment drawings.
8 Communicate trade and occupational related information effectively.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Get Started as an Apprentice

1 Go to your local Joint Apprenticeship Committee and fill out an application (you do not need to be a resident of the county you apply to).
2 Send your high school transcripts to your local Union Hall. Transcript request forms are available at the Union Hall. A one-year high school algebra equivalent is available, and if coursework is needed, register for Gateway's Algebra/Pre-technical course (854-761).
3 Pass the basic reading, writing and math test required per application. Testing information is available at Union Hall.
4 The Joint Apprenticeship Committee will set up interviews for candidates that have passed the test and have high school transcripts on file. Interviews are scheduled twice a year in Racine and Kenosha.
5 After being interviewed, your name will be ranked with the other eligible candidates. Apprenticeships are offered by the Union in order to the highest-ranked candidates on the list.
6 Once hired by a contractor, Gateway's Apprenticeship Department will be notified that you are an apprentice and will communicate with you regarding registration, classes and books.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1 Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and, the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2 Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3 Students must complete all courses with a grade of "C" or better.
4 Students must have a valid driver's license.
5 Textbook, supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
6 Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Pathway to Success

Construction Electrical Apprentice (50-413-2)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/construction-electrical-apprentice**. Please see your academic advisor for additional information.*

Course Number	Course Name	Credits	Hours
*413-506	Electrical Theory I/Construction	4.00	144
*413-516	Electrical Theory II/Construction	4.00	144
*413-526	Electrical Theory III/Construction	4.00	144
*413-536	Electrical Theory IV/Construction	4.00	144
*413-546	Electrical Theory V/Construction	4.00	144

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 4 years
- On the job time – 8000 Hours
- Related Instruction Time – 720 Hours
- Additional training – Valid credential issued by WI Dept of Safety and Professional Services; First Aid and CPR certifications; Complete unpaid related instruction; Transition to Trainer; OSHA 30-hr safety certification; pass the State Electrical Journey worker Exam Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/construction-electrician.htm

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
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262-564-2954
apprenticeship@gtc.edu

Cosmetologist Apprentice (50-502-1)

Effective 2026/2027

Program Description

Cosmetology is a vibrant career with many employment and career opportunities. Salons, spas, barber shops, and beauty supply companies need professional stylists. A career in cosmetology combines professional techniques with creativity to provide a challenging career with many rewards. The cosmetology apprenticeship program provides the theory training to allow the student to satisfy the Wisconsin state requirements to become a licensed professional.

Program Learning Outcomes

Graduates will be able to:

1. Summarize safety and sanitation procedures.
2. Summarize the current Wisconsin administrative codes and statutes for cosmetology.
3. Demonstrate interpersonal skills for success.
4. Compare haircutting services.
5. Compare shampoo services.
6. Compare skin care services.
7. Compare texture services.
8. Compare hair color services.
9. Compare hair styling and finishing techniques.
10. Compare nail services.
11. Develop strategies to market products and services.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Get Started as a Barber Apprentice

1. To begin identifying or planning your apprenticeship, contact the local Apprenticeship Training Representative at 414.216.8417
2. If an employer wishes to hire you, they will submit an apprentice application to the Wisconsin Department of Workforce Development (DWD). If the DWD determines that you meet the Bureau of Apprentice Standards qualifications, you will be given a credential notice.
3. You and your employer will submit the credential notice, the Apprentice Application (Form #1488) and fee ($10.00) to the Department of Safety and Professional Services, P.O. Box 8935, Madison, WI 53708-8935.
4. The Department of Safety and Professional Services will issue the apprentice permit after the application is approved. You may begin to work after your permit is issued. Your permit will be valid for three (3) years.
5. Once your permit is in place, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1. Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading.
2. Entry requirements vary by employer. High school diploma or equivalent is recommended.
3. Applicants apply directly to a licensed, full service salon. The salon must be in business for at least one year.
4. Students must complete all courses with a grade of "C" or better.
5. Textbook supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
6. Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Cosmetologist Apprentice (50-502-1)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/cosmetologist-apprentice**. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	*502-750	Haircutting for Cosmetologists	.75	24
1	*502-751	Cosmetology Laws and Rules	.75	20
1	*502-752	Professional Development for Cosmetologists	.50	10
1	*502-753	Cosmetology Salon Ecology	.75	20
2	*502-754	Hairstyling and Design for Cosmetologists	1	32
2	*502-755	Cosmetology Hair and Scalp Care	.50	16
2	*502-756	Trichology for Cosmetology	.50	18
3	*502-757	Hair Coloring for Cosmetologists	1	32
3	*502-758	Chemical Texturizing for Cosmetologists	1	30
3	*502-759	Cosmetology Salon Industry Business Operations	.25	8
4	*502-760	Histology of the Skin for Cosmetology	.50	16
4	*502-761	Cosmetology Skin Care Services	1	30
4	*502-762	Manicuring, Pedicuring, and Artificial Nails	.50	16
4	*502-763	Nail Structure and Related Disorders	.50	16
5	*455-455	Transition to Trainer: Your Role as a Skilled Worker Trainer	.20	8

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 2 years
- On the job time – 3712 Hours
- Related Instruction Time – 288 Hours
- Additional training – Apprentice permit from the WI Department of Safety and Professional Services, Transition to Trainer
  Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/cosmo.htm

NOTES

- Apprenticeship textbooks are obtained through an offsite vendor.
- Contact Pivot Point International representative, Matt Kyle, at mkyle@pivot-point.com or call 847-866-0500, Ext. 7372 for more information.
- Black scrubs are required for this apprenticeship program. If you have any questions, please contact the Apprenticeship Department.

If you need assistance getting started
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Pathway to Success

Culinary Apprentice (50-316-3)

Effective 2026/2027

Program Description

The Culinary Apprenticeship program begins with basic theory and techniques of food production and service. Building on these basics, the program then develops advanced culinary techniques as well as skills in menu planning, purchasing, cost control, and food service supervision through a combination of lecture, demonstration, and extensive hands-on experience. Culinary Apprenticeship program are qualified for advanced positions in food preparation and service in both commercial and institutional establishments, including full-service restaurants, hotels, supper and private clubs, colleges, hospitals, and delis.

Program Learning Outcomes

Graduates will be able to:

1 Apply principles of safety and sanitation in food service operations.
2 Apply principles of nutrition.
3 Demonstrate culinary skills.
4 Manage food service operations.
5 Plan menus.
6 Analyze food service financial information.
7 Relate food service operations to sustainability.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence

Technology Competence

Get Started as an Apprentice

1 You should apply directly to employers, and entry requirement vary by employer.
2 If you need assistance finding an employer who will take you on as an apprentice, don't hesitate to get in touch with the local WI DWD-BAS Apprenticeship Training Representative at 414.216.8417 to find an employer who has been approved to train apprentices. You can also find apprenticeship employers at https://dwd.wisconsin.gov/apprenticeship/ra/applicants.htm.
3 Once your contract is in place with your employer and WI DWD-BAS, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.
4 You can contact Gateway's Apprenticeship department at apprenticeship@gtc.edu or 262.564.2954.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1 Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and, the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2 Entry requirements vary by employer. High school diploma or equivalent is recommended.
3 Students must complete all courses with a grade of "C" or better.
4 A uniform and knife kit is required for this program. Please contact instructor/apprenticeship department for more details.
5 Textbook supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
6 Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Pathway to Success

Culinary Apprentice (50-316-3)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/culinary-apprentice**. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	316-170	Sanitation and Hygiene	1.00	18
1	316-150	Culinary Basics	4.00	144
2	316-152	Intermediate Culinary	4.00	144
3	316-109	Short Order Deli	3.00	108
4	316-130	Nutrition	2.00	36

Training at a Glance

- Time to complete – Varies
- On the job time – Varies
- Related Instruction Time – Varies
- Additional training – Transition to Trainer
- Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/cook.htm

If you need assistance getting started
Gateway's Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Facilities Maintenance Technician (50-443-2)

Effective 2026/2027

Program Description

The Facilities Maintenance apprenticeship program will prepare you for a career in the maintenance and repair of residential and light commercial structures. You will get training from highly qualified instructors in: heating, ventilation and air conditioning, electricity, electronic controls and instrumentation, basic plumbing, fundamentals of hydronics, building codes and blueprint reading, electro-mechanical devices and general repair. Along with these skills, you will gain an overview of federal, state and local regulations that impact facility maintenance. You will learn to assess and solve problems quickly in emergency situations based upon an understanding or regulatory guidelines.

Program Learning Outcomes

Graduates will be able to:

1. Repair/replace basic electrical components.
2. Perform preventative maintenance procedures.
3. Perform basic drywall repairs.
4. Perform basic plumbing repairs.
5. Use portable safety tools.
6. Apply sustainable practices to facility operations.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Get Started as an Apprentice

1. You should apply directly to employers, and entry requirement vary by employer.
2. If you need assistance finding an employer who will take you on as an apprentice, don't hesitate to get in touch with the local WI DWD-BAS Apprenticeship Training Representative at 414.216.8417 to find an employer who has been approved to train apprentices. You can also find apprenticeship employers at https://dwd.wisconsin.gov/apprenticeship/ra/applicants.htm.
3. Once your contract is in place with your employer and WI DWD-BAS, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.
4. You can contact Gateway's Apprenticeship department at apprenticeship@gtc.edu or 262.564.2954.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1. Students must be physically able to perform the job.
2. Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3. Students must complete all courses with a grade of "C" or better.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Facilities Maintenance Technician (50-443-2)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/facilities-maintenance-apprentice**. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	*601-110	Air Conditioning Fundamentals	3	90
1	*401-304	HVAC Electricity/Electronics	3	108
2	*601-116	Mechanical Fundamentals	3	90
2	*443-314	Mechanical Systems	2	72
3	*601-121	Heating Systems	3	90
3	*804-370	Mathematics I/Applied	2	72
4	*601-128	Electrical Controls and Systems	3	90
4	*601-305	Facility Operating Engineer LP	3	108
5	*443-315	Industrial Preventative Maintenance	2	72
5	*601-147	Control Circuit Applications	3	90
6	*601-112	Environmental Systems	2	63
6	*601-145	Electronic Energy Management	3	90

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 2 years
- On the job time – 5200 Hours
- Related Instruction Time – 720 Hours
- Additional training – First Aid and CPR certifications; Transition to Trainer
- Consult the Wisconsin Bureau of Apprenticeship Standards website for more information

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Pathway to Success

HVAC Apprentice (50-401-9)

Effective 2026/2027

Program Description

HVAC Installation Technicians work with heating, air-conditioning and refrigeration systems that consist of many mechanical, electrical, and electronic components, including motors, compressors, pumps, boilers, fans, ducts, pipes, thermostats and switches. In central heating systems, a furnace or boiler heats air that is distributed throughout the building by a system of metal or fiberglass ducts or piping. Technicians must be able to maintain, diagnose, and correct problems throughout the entire system. They may adjust system controls to recommended settings and test the performance of the entire system using special tools and test equipment. The work involves installing ductwork and installing and wiring environmental control systems and testing and balancing air-handling equipment and hydronic and piping systems. They install, service, and repair heating and air conditioning systems in residences and commercial and industrial establishments. Apprentices will apply trade practices to residential, commercial, industrial and service.

Program Learning Outcomes

Graduates will be able to:

1. Test pipe or tubing joints and connections for leaks, using pressure gauge or soap-and-water solution.
2. Test electrical circuits and components for continuity, using electrical test equipment.
3. Adjust system controls to settings recommended by the manufacturer to balance the system, using hand tools.
4. Discuss heating-cooling system malfunctions with users to isolate problems or to verify that malfunctions have been corrected.
5. Inspect and test system to verify system compliance with plans and specifications and to detect and locate malfunctions.
6. Repair or replace defective equipment, components, or wiring.
7. Reassemble and test equipment following repairs.
8. Record and report all faults, deficiencies, and other unusual occurrences, as well as the time and materials expended on work orders.
9. Comply with all applicable standards, policies, and procedures, including safety procedures and the maintenance of a clean work area.
10. Obtain and maintain required certifications.
11. Relate learning outcomes to trade practices in residential, commercial, industrial, and service.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Get Started as an Apprentice

1. Go to the ABC of WI Apprenticeship Office to pick up an application or fill out an application request online.
2. Achieve a passing score on algebra, arithmetic and reading portions of the Accuplacer test. The Accuplacer test is available at Gateway's Kenosha and Racine campuses and the cost is $15. Contact the Testing Center to schedule an appointment at 262-564-2542.
3. You will receive a letter of introduction and a list of ABC of WI approved apprenticeship trainers for HVAC. Your letter of introduction should be presented to local ABC of WI approved apprenticeship trainers when applying for apprenticeship jobs.
4. You must find an ABC of WI-approved trainer to hire you before you can become an apprentice. Once hired, you will be invited to meet with the Apprenticeship Committee for final approval and to sign your contract.
5. Once your contract is in place Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1. Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2. Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3. Students must complete all courses with a grade of "C" or better.
4. Students must have a valid driver's license.
5. Textbook, supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
6. Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

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EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

HVAC Apprentice (50-401-9)

Effective 2026/2027

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Course Number	Course Name	Credits	Hours
*401-501	Introduction to HVAC	1.1	40
*401-502	Tube and Piping Skills	1.1	40
*401-506	Forced Air Heating Intro to	1.1	40
*401-508	Cooling Fundamentals	1.1	40
*401-571	Mechanical Refrigeration Circuit	1.1	40
*401-570	Ductwork Construction & Airside Basics	1.1	40
*401-569	Alternating Current and PM Basics	1.1	40
*401-568	Venting & Introduction to Hydronics	1.1	40
*401-566	Troubleshooting HVAC Systems	1.1	40
*401-567	Hydronics & Steam Systems	1.1	40
*401-565	Refrigerant; Advanced Topics	1.1	40
*401-564	Heat Pumps	1.1	40
*401-563	IAQ/DDC Controls & Air Balancing	1.1	40
*401-562	Commercial Concepts, Advanced	1.1	40
*401-560	Comm/Ind Refrigeration & Alt. Systems	1.1	40
*401-561	Heating & Cooling Design	1.1	40

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 5 years
- On the job time – 8440 Hours
- Related Instruction Time – 640 Hours
- Additional training – Valid credential issued by WI Dept of Safety and Professional Services; First Aid and CPR certifications; Complete unpaid related instruction; Transition to Trainer
  Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/environmental-systems-technician.htm

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Machinist Apprentice (50-420-2)

Effective 2026/2027

Program Description

Machinists are highly skilled individuals who use machine tools, such as lathes, milling machines, and machining centers, to produce precision machined parts. Precision Machinists produce small batches or one-of-a-kind items. They use their knowledge of the working properties of materials and their skill with machine tools to plan and carry out the operation needed to make a variety of products that meet precise specifications. Along with operating machines that use cutting tools to shape work pieces, machinists also utilize machines that cut with lasers, water jets, or electrified wires. While some of the computer controls may be similar, Machinists must understand the unique cutting properties of these different machines. As engineers create new types of machine tools and new materials to machine, machinists must constantly learn new machining properties and techniques.

Program Learning Outcomes

Graduates will be able to:

1 Inspect parts and material.
2 Apply principles of milling machine operations, including manual and/or CNC controlled.
3 Compare turning machine operations, including manual and/or CNC controlled.
4 Compare cut-off machine operations, including manual and/or CNC controlled.
5 Apply metallurgical principles to materials and work processes.
6 Compare practices for assembling parts per specifications.
7 Local optional work processes may be used as additional college program outcomes.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Get Started as an Apprentice

1 You should apply directly to employers, and entry requirement vary by employer.
2 If you need assistance finding an employer who will take you on as an apprentice, don't hesitate to get in touch with the local WI DWD-BAS Apprenticeship Training Representative at 414.216.8417 to find an employer who has been approved to train apprentices. You can also find apprenticeship employers at https://dwd.wisconsin.gov/apprenticeship/ra/applicants.htm.
3 Once your contract is in place with your employer and WI DWD-BAS, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.
4 You can contact Gateway's Apprenticeship department at apprenticeship@gtc.edu or 262.564.2954.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1 Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and, the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2 Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3 Students must complete all courses with a grade of "C" or better.
4 Students must have a valid driver's license and pass an aptitude test.
5 Textbook, supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
6 Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Machinist Apprentice (50-420-2)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/machinist-apprentice**. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	*420-720	Cut-Off Machines for Machine Trades Apprentices	.25	9
1	*420-741	Metallurgy & Materials for Machine Trades Apprentices	.50	18
1	*420-740	Mathematics for the Machine Trades	1.25	45
2	*420-714	Engineering Drawings for Machine Trades Apprentices	1	36
2	*420-713	Precision Measurement for Machine Tool Trade Apprentices	1	36
3	*420-742	Turning Machines for Machine Trades Apprentices	1	36
3	*420-743	Milling Machines for Machine Trades Apprentices	1	36
4	*420-719	Grinding Machines for Machine Trades Apprentices	.50	18
4	*420-744	CAD/CAM for Machine Trades Apprentices	1.5	54
5	*420-726	Tooling and Workholding for Machine Trades Apprentices	.50	10
5	*420-727	Geometric Dimensioning and Tolerancing for Machine Trades Apprentices	.50	10
5	*420-745	CNC Programming and Operations 1 for Machine Trades Apprentices	1	36
6	*420-746	CNC Programming and Operations 2 for Machine Tool Trades Apprentices	2	72
6	*455-455	Transition to Trainer: Your Role as a Skilled Worker Trainer	.20	8

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 3 years
- On the job time – 7888 Hours
- Related Instruction Time – 432 Hours
- Additional training – Transition to Trainer
  Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/machinist.htm

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Maintenance Technician Apprentice (50-464-1)

Effective 2026/2027

Program Description

The Maintenance Technician works on mechanical and electrical equipment and machines in paper mills, foundries, production mills, food processing, schools and hospitals. The mechanical would include installing equipment, repair and replace units, maintaining equipment and using machines such as lathes, drill presses and various hand tools. The electrical would include working with electrical drawings, troubleshooting electrical motors, AC and DC drives, PLC's (programmable logic controllers), and solid-state devices.

Program Learning Outcomes

Graduates will be able to:

1 Apply AC and DC theory to an industrial setting.
2 Apply the National Electric Code requirements to industrial equipment and facilities.
3 Apply operational principles to transformers.
4 Maintain electric motors and motor controls.
5 Apply operational and troubleshooting principles to variable speed drives.
6 Apply operational and troubleshooting principles to programmable logic controllers and automation equipment.
7 Communicate trade and occupational related information effectively.
8 Demonstrate proper rigging techniques.
9 Select an appropriate power transmission system for a given application.
10 Identify suitable pumps for given applications.
11 Recommend bearings for given applications.
12 Apply operational and troubleshooting principles to fluid power systems.
13 Plan maintenance schedules for a given system.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Get Started as an Apprentice

1 You should apply directly to employers, and entry requirement vary by employer.
2 If you need assistance finding an employer who will take you on as an apprentice, don't hesitate to get in touch with the local WI DWD-BAS Apprenticeship Training Representative at 414.216.8417 to find an employer who has been approved to train apprentices. You can also find apprenticeship employers at https://dwd.wisconsin.gov/apprenticeship/ra/applicants.htm.
3 Once your contract is in place with your employer and WI DWD-BAS, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.
4 You can contact Gateway's Apprenticeship department at apprenticeship@gtc.edu or 262.564.2954.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1 Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and, the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2 Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3 Students must complete all courses with a grade of "C" or better.
4 Textbook, supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
5 Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Pathway to Success

Maintenance Technician Apprentice (50-464-1)

Effective 2026/2027

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at ***https://www.gtc.edu/maintenance-technician-apprentice****. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	*804-502	Math 1 for Apprentice	1.0	36
1	*421-515	Blueprint Reading I/Metal Trades	1.0	36
1	*462-503	Industrial Mechanic Fundamentals I	1.0	36
1	*462-504	Industrial Mechanic Fundamentals II	1.0	36
2	*442-510	Welding Fundamentals	1.0	36
2	*419-567	Basic Hydraulics Beginning	1.0	36
2	*419-551	Pneumatics Apprentice	1.0	36
2	*419-511	Hydraulic Pumps Apprenticeship	.75	24
2	*420-520	Precision Measurement	.50	12
3	*423-730	Bearings	.75	24
3	*423-565	Principles of Rigging	.50	18
3	*423-731	Couplings & Alignment	1.0	36
3	*423-716	Metallurgy	1.0	36
3	*423-724	Preventative & Predictive Maintenance	1.0	36
4	*423-501	Equipment Installation	.75	24
4	*413-701	Elect. Safety & Print Reading	1.0	36
4	*413-528	Direct Current Fundamentals	1.0	36
4	*413-538	Alternating Current Fundamentals	1.0	36
5	*413-705	Codes for Industrial Electricians	2.25	78
5	*413-602	AC & DC Motors	1.0	36
5	*413-548	Programmable Logic Controllers I	1.0	36
6	*413-577	Motor Controls 1	1.0	36
6	*413-589	Transformers	1.0	36
6	*413-603	Solid State Electronics Basics	1.0	36
6	*413-604	Variable Speed Drives	1.0	36

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 5 years
- On the job time – 9280 Hours
- Related Instruction Time – 864 Hours
- Additional training – First Aid and CPR certifications; Transition to Trainer
  Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/maintenance-technician.htm

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Mechatronics Technician Apprentice (50-620-1)

Effective 2026/2027

Program Description

This occupation requires combined knowledge of electrical, electronic and mechanical systems used in industrial plants. Workers frequently support automation and robotic technologies. Work processes include installing, repairing, and maintaining equipment/devices. Troubleshooting systems involved in manufacturing and process control are critical requirements for workers in these occupations. Workers typically operate and debug, industrial computer and communication systems including PLC's, PCs, and HMI technologies. Workers machine metal and other materials; fabricate parts and weld/join components. Documenting work performed, maintaining accurate records, and working in a collaborative environment are critical interpersonal skills. Employees in some, but not all plants, support facilities, utilities and grounds.

Program Learning Outcomes

Graduates will be able to:

1 Perform work safely.
2 Install mechanical equipment.
3 Install electrical equipment.
4 Maintain mechanical equipment.
5 Troubleshoot mechatronic systems.
6 Operate machine shop tools and machines.
7 Produce precision fabricated parts.
8 Maintain automated mechatronic systems.
9 Modify devices and systems.
10 Maintain documents and records.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Get Started as an Apprentice

1 You should apply directly to employers, and entry requirement vary by employer.
2 If you need assistance finding an employer who will take you on as an apprentice, don't hesitate to get in touch with the local WI DWD-BAS Apprenticeship Training Representative at 414.216.8417 to find an employer who has been approved to train apprentices. You can also find apprenticeship employers at https://dwd.wisconsin.gov/apprenticeship/ra/applicants.htm
3 Once your contract is in place with your employer and WI DWD-BAS, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.
4 You can contact Gateway's Apprenticeship department at apprenticeship@gtc.edu or 262.564.2954.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1 Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and, the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2 Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3 Students must complete all courses with a grade of "C" or better.
4 Textbook, supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
5 Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Mechatronics Technician Apprentice (50-620-1)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/mechatronics-technician-apprentice**. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	*620-510	Math Review for Mechatronics	1.00	36
1	*620-511	Mechatronic Principles	2.00	72
1	*620-514	DC Electricity for Mechatronic	1.00	36
2	*620-515	AC Electricity for Mechatronics	1.00	36
2	*620-512	Motors & Motor Controls	2.00	72
2	*620-516	National Electrical Code	1.00	36
3	*620-517	Fluid Power Systems	2.00	72
3	*620-520	Servos and Drives	1.00	36
3	*620-508	Power Transmission Systems	1.00	36
4	*620-513	Machining Concepts	2.00	72
4	*620-521	Intro to Programmable Logic Controllers	2.00	72
5	*620-522	HMI Technologies & PLC Applications	2.00	72
5	*620-518	Introduction to Robotic System	2.00	72
6	*620-519	Introduction to Robotic Integration	3.00	108
6	*620-509	Welding Basics	1.00	36

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 5 years
- On the job time – 9136 Hours
- Related Instruction Time – 864 Hours
- Additional training – Transition to Trainer
  Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/mechatronics-technician.htm

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Pathway to Success

Plumbing Apprentice (50-427-3)

Effective 2026/2027

Program Description

Plumbing apprentices plan, install, troubleshoot, and repair all aspects of water supply, waste, and vent systems, as well as gaseous fuel systems, following the Wisconsin Administrative Plumbing Code. They interpret blueprints, analyze technical specifications, and follow instructions on what and where work is to be done. They plan their work in a logical sequence; coordinate it with other trades, perform work in a quality manner and in a reasonable amount of time. They choose appropriate tools, equipment, and materials to perform their duties. They communicate effectively and are good team members.

Program Learning Outcomes

Graduates will be able to:

1 Apply state plumbing code requirements to the installation and repair of sanitary drain systems.
2 Apply state plumbing code requirements to the installation and repair of venting systems.
3 Apply state plumbing code requirements to the installation and repair of water supply systems.
4 Apply state plumbing code requirements to the installation and repair of storm drain systems.
5 Apply State plumbing code requirements to the installation and repair of POWTS systems.
6 Refer to the Wisconsin Administrative Plumbing codes.
7 Prepare for Journey level licensure examination.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1 Communication Competence
2 Critical Thinking and Problem Solving
3 Professionalism and Career Management
4 Teamwork and Collaboration
5 Cultural Competence
6 Technology Competence

Get Started as an Apprentice

1 Go to the Plumbers and Steamfitters Training Center and fill out an application:

K-R-W Plumbing Apprenticeship Committee
14011 Spring Street
Sturtevant, WI 53177
262-732-4103

2 Have high school transcripts sent to the Plumbers and Steamfitters Training Center. Transcript request forms are available at the Training Center.
3 Achieve a passing score on the algebra, arithmetic and reading portions of the Accuplacer test, which is available at Gateway's Kenosha and Racine campuses for $15. Contact the Testing Center at 262-564-2542 to schedule an appointment.
4 The Plumbing Apprenticeship Committee will set up interviews for those persons who have high school transcripts and passing Accuplacer scores on file. Interviews are scheduled twice a year at the Plumbers and Steamfitters Training Center.
5 After passing the interview, your name will be placed on a list of eligible contractors when applying for apprenticeship jobs.
6 You will receive a letter of introduction to be presented to local contractors when applying for apprenticeship jobs. You must find a contractor to hire you before you can become an apprentice.
7 Once hired by a contractor, you'll be notified that you are an apprentice and will sign a contract with the Bureau of Apprenticeship Standards.
8 Once your contract is in place, Gateway's Apprenticeship Department will communicate with you regarding registration, classes and books.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1 Students must be physically capable of performing the activities of the job, including equipment/tool use, for course grading. This may include any of these activities for an extended period: standing, sitting, reaching, bending, finger/hand dexterity, and, the use of head, face, eye, ear, hand and foot protection in various dynamic work environments including cramped/small spaces and hot or cold temperatures.
2 Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3 Students must complete all courses with a grade of "C" or better.
4 Students must have a valid driver's license.
5 Students must pass an aptitude test, complete a personal interview and submit an application.
6 Textbook, supplies and personal protective equipment requirements and sources will be provided by your instructor as well as outlined in the syllabus.
7 Virtual instruction will require the students to participate with the computer camera and microphones on when requested by the instructor.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

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Plumbing Apprentice (50-427-3)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/plumbing-apprentice**. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	*427-751	Sanitary Drains 1	2.00	72
2	*427-752	Vents and Venting Systems	2.00	72
3	*427-753	Water Distribution 1	2.00	72
4	*427-754	Water Distribution 2	2.00	72
5	*427-755	Sanitary Drains 2	2.00	72
6	*427-756	Private Onsite Wastewater Treatment Systems (POWTS)	2.00	72
7	*427-757	Green Plumbing Applications	2.00	72
8	*427-758	Plumbing Advanced Topics / TSA	2.00	72
8	*455-455	Transition to Trainer: Your Role as a Skilled Worker Trainer	.20	8

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 5 years
- On the job time – 7428 Hours
- Related Instruction Time – 572 Hours
- Additional training – 260 hours extra in: Plumbing Applications Lab, Plumbing Blueprint Reading, Plumbing Repair, Transition to Trainer, Isometric Interpretation & Drawing, Transit/Level/Laser, Welding, Safety/OSHA, First Aid/CPR, Transition to Trainer during final year. Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/plumbing.htm

If you need assistance getting started,
Gateway’s Apprenticeship Department is happy to help.
QUESTIONS?
PLEASE CONTACT:
Gateway Technical College
Apprenticeship Department
262-564-2954
apprenticeship@gtc.edu

Tool & Die Apprentice (50-439-3)

Effective 2026/2027

Program Description

Tool and die makers analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, gauges, jigs, fixtures (devices that hold metal while it is shaped, stamped or drilled), gauges, and machinist's hand tools. Die makers construct metal forms (dies) to shape metal in stamping and forging operations. A tool and die maker operate various machine tools to make and repair molds, special machinery, tools, dies, jigs, fixtures and die cast dies. In this apprenticeship, learn basic theory in machining, blueprint reading and metallurgy, in addition to knowledge in stamping, mold making blanking, jigs and fixtures, plastics and die casting. Computer-assisted CNC machining and die and mold design are also covered.

Program Learning Outcomes

Graduates will be able to:

1. Inspect parts and material.
2. Apply knowledge of milling machine operations, including manual and/or CNC controlled.
3. Compare turning machine operations, including manual and/or CNC controlled.
4. Explore precision grinding machine operations including manual and/or CNC controlled.
5. Compare cut-off machine operations, including manual and/or CNC controlled.
6. Apply metallurgical principles to materials and work processes.
7. Compare practices for assembling parts per specifications.
8. Design jigs and fixtures.
9. Summarize practices to produce dies for a variety of machining and manufacturing operations.
10. Local optional work processes may be used as additional college program outcomes.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

1. Communication Competence
2. Critical Thinking and Problem Solving
3. Professionalism and Career Management
4. Teamwork and Collaboration
5. Cultural Competence
6. Technology Competence

Get Started as an Apprentice

1. You should apply directly to employers, and entry requirement vary by employer.
2. If you need assistance finding an employer who will take you on as an apprentice, don't hesitate to get in touch with the local WI DWD-BAS Apprenticeship Training Representative at 414.216.8417 to find an employer who has been approved to train apprentices. You can also find apprenticeship employers at https://dwd.wisconsin.gov/apprenticeship/ra/applicants.htm
3. Once your contract is in place with your employer and WI DWD-BAS, Gateway's Apprenticeship department will communicate with you regarding registration, classes and books.
4. You can contact Gateway's Apprenticeship department at apprenticeship@gtc.edu or 262.564.2954.

Graduation Requirements

- *Minimum of 2.0 ("C") or above for all required courses.
- Meet minimum hourly paid related instruction requirements per WI Registered Apprenticeship Contract.

Notes

1. Students must be physically able to perform the job.
2. Students must be 18 years of age and submit official high school, GED, or HSED transcript including a graduation or passing date.
3. Students must complete all courses with a grade of "C" or better.

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for one year or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult My Gateway for exact fee amounts. The District reserves the right to modify, cancel, or relocate course offerings in response to factors such as low enrollment, resource availability, or other relevant considerations to ensure high-quality educational experiences. Students will be notified in writing and are encouraged to meet with their Academic Advisor to adjust their academic plan.

EQUAL OPPORTUNITY EMPLOYER AND EDUCATOR/EMPLEADOR Y EDUCADOR QUE OFRECE IGUALDAD DE OPORTUNIDADES

Pathway to Success

Tool & Die Apprentice (50-439-3)

Effective 2026/2027

*The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here. All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan. Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.). More detailed scheduling information for this program can be found at **https://www.gtc.edu/tool-and-die-apprentice**. Please see your academic advisor for additional information.*

Term	Course Number	Course Name	Credits	Hours
1	*420-740	Mathematics for the Machine Trades	1.25	45
1	*420-741	Metallurgy & Materials for Machine Trades Apprentices	.50	18
1	*420-720	Cut-Off Machines for Machine Trades Apprentices	.25	9
2	*420-714	Engineering Drawings for Machine Trades Apprentices	1	36
2	*420-713	Precision Measurement for Machine Tool Trade Apprentices	1	36
3	*420-742	Turning Machines for Machine Trades Apprentices	1	36
3	*420-743	Milling Machines for Machine Trades Apprentices	1	36
4	*420-719	Grinding Machines for Machine Trades Apprentices	.50	18
4	*420-744	CAD/CAM for Machine Trades Apprentices	1.5	54
5	*420-726	Tooling and Workholding for Machine Trades Apprentices	.50	10
5	*420-727	Geometric Dimensioning and Tolerancing for Machine Trades Apprentices	.50	10
5	*420-745	CNC Programming and Operations 1 for Machine Trades Apprentices	1	36
6	*420-746	CNC Programming and Operations 2 for Machine Tool Trades Apprentices	2	72
7	*420-728	Stamping Diemaking for Machine Trades Apprentices	1	36
7	*420-729	Mold Making for Machine Trades Apprentices	1	36
8	*420-723	Electrical Discharge Machining for Tool and Die Apprentices	.50	18
8	*420-730	Stamping Die Design Applications for Machinie Trades Apprentices	1	36
8	*455-455	Transition to Trainer: Your Role as a Skilled Worker Trainer	.20	8

(*) Students must achieve a minimum of 2.0 (“C”) or above for this major course to meet graduation requirements.

Training at a Glance

- Time to complete – Approximately 4 years
- On the job time – 10,400 Hours
- Related Instruction Time – 576 Hours
- Additional training – First Aid and CPR Certifications; Transition to Trainer
  Consult the Wisconsin Bureau of Apprenticeship Standards website for more information at https://dwd.wisconsin.gov/apprenticeship/occupations/tool-n-die-maker.htm

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