Part-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology

Electronics (10-605-1)

Associate of Applied Science

Effective 2023/2024

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.).

I-D = iMET Center/days, I-E = iMET Center/evenings, F=Fall, S=Spring, SU=Summer

Term	Course #	Cr.	Course Title	**Requisites** (prereq- before/ coreq-with)	I-D	I-E
1	890-155	1	Gateway to Success (G2S)		F+	F+
1	*605-130	4	Digital Electronics[3]		F	F
1	804-115	5	College Technical Math 1[1,3]	Prereq: 834-110	F+	F+
2	*605-113	3	DC/AC I[3]		S	S
2	804-197	5	College Algebra & Trig w Apps[3]	Prereq: 804-115	S+	S+
3	*605-114	3	DC/AC II[3]	Prereq: 605-113; Coreq: 804-115	SU	SU
3	801-136	3	English Composition 1[1,3]	Prereq: 831-103 OR 831-107	SU+	SU+
3	809-198	3	Psychology, Introduction to[1,3]	Prereq: 838-105 OR 831-107	SU+	SU+
4	*605-120	4	Electronic Devices I[3]	Prereq: 605-113	F	F
4	801-197	3	Technical Reporting	Prereq: 801-136	F+	F+
4	XXX-XXX	3	Elective Course	Take 3 credits at the associate degree level. Suggested electives listed on back.	F	F
5	*605-121	4	Electronic Devices II	Prereq: 605-120	S	S
5	*605-133	3	Industrial Data Communications	Prereq: 605-113 OR 605-107	S	S
5	*605-138	3	Circuit Construction and Repair		S	S
6	*605-136	3	PLC System Design	Prereq: 605-130	SU	SU
6	*605-150	3	Industrial Electronics	Prereq: 605-114; 605-120	SU	SU
7	*605-190	4	Microprocessors	Coreq: 605-114; 605-121; 801-197	F	F
7	*806-154	4	General Physics 1[3]	Prereq: 804-115 OR 804-197 OR 804-198	F+	F+
7	809-195	3	Economics[1,3]	Prereq: 838-105 OR 831-107	F+	F+

Minimum Program Total Credits Required: 64

Notes associated with courses (identified by a superscript number at the end of the course title) are located on the back of the sheet.

Mastery of this course 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.

= Milestone Course. Faculty have identified this course as providing a strong foundation for success throughout the program.

(*) indicates students must achieve a combined average of 2.0 ("C") or above for these major courses to meet graduation requirements.

(+) indicates students may take these courses at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

Electronics (10-605-1)

Electronics 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. The operation and use of various test and diagnostic equipment is included throughout the curriculum. The program prepares the students for a broad range of entry-level electronic technician positions.

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:

- 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

1. Minimum 64 credits with an average 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

662-112 DCAC 3	662-124 Electronic Circuit Analysis
809-196 Sociology, Introduction to	

Notes

1. Satisfactory college placement results (through multiple measures or placement test scores) or successful remediation is required prior to enrollment. See an advisor for details.
2. 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.
3. A credit for prior learning assessment is available for this course. For more information, please contact cfpl@gtc.edu.