



**Full-Time Pathway to Success**

School of Manufacturing, Engineering, and Information Technology

**Electromechanical Maintenance Technician (31-620-3)**

Technical Diploma

**Effective 2020/2021**

*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.*

**E-D = Elkhorn/days, F=Fall, S=Spring, SU=Summer**

Term	Course #	Cr.	Course Title	Requisites (prereq- before/ coreq-with)	E-D
1	890-155	1	📍 Gateway to Success (G2S)		F
1	*620-310	2	🎓 Industrial Controls for Maintenance		F
1	*612-102	3	Pneumatic/Hydraulics, Intro		F
1	*628-310	2	Mechanical Skills I		F
1	*628-300	2	Machining for Maintenance		F
1	664-100	2	Industrial Control Systems, Intro to		F
1	664-110	2	Mechatronics, Intro to		F
1	804-370	2	Mathematics I/Applied <sup>1</sup>	Prereq: 854-760	F
2	801-301	1	Writing Principles <sup>1</sup>	Prereq: 851-760 OR 851-756	S
2	*444-339	3	Gauging and Quality Control <sup>4</sup>		S
2	*620-303	3	Motors and Ind Electrical Systems	Prereq: 620-302 OR 620-310	S
2	*620-311	2	PLC's and HMI's I	Prereq: 620-302 OR 620-310	S
2	*620-305	3	Process and Systems Controls for Maint	Prereq: 620-302 OR 620-310; 804-370	S
2	*628-115	3	Industrial Robotics and Programming		S

**Minimum Program Total Credits Required: 31**

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 minimum of 2.0 ("C") or above for these major courses to meet graduation requirements.

### **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. Troubleshoot electrical and mechanical systems and devices.
3. Repair electrical and mechanical systems.
4. Communicate technical information.
5. Perform basic manual machining and gauging applications.

### **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
- 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 high school GPA of 2.6, minimum college GPA of 2.0, or complete valid reading, writing, and math placement assessments.

### **Graduation Requirements**

1. Minimum 31 credits with an average 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 satisfactory placement test score (or successful remediation) is required prior to enrollment. See advisor for details.
2. A hand calculator capable of trigonometric functions is required: cost is approximately \$25.
3. Safety glasses are required in labs. If prescription safety glasses are necessary, allow a minimum of 90 days.
4. A credit for prior learning assessment is available for this course. For more information, please contact [cfpl@gtc.edu](mailto:cfpl@gtc.edu).

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for a period of two years 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. 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.