



Full-Time Pathway to Success

School of Manufacturing, Engineering, and Information Technology
<https://www.gtc.edu/electromechanical-maintenance-technician>

Electromechanical Maintenance Technician (31-620-3)

Technical Diploma
Effective 2025/2026

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, F=Fall, S=Spring, SU=Summer

Term	Course #	Cr.	Course Title	Requisites (prereq- before/ coreq-with)	I-D
1	890-155	1	📍 Gateway to Success (G2S)		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 ⁴		F
1	*664-105	2	Intro to Industrial Robots		F
1	*664-110	2	Mechatronics, Intro to ⁴		F
1	*664-116	2	Intro to Mfg Quality Control Systems		F
2	*620-108	3	Fundamentals of Industrial Controls		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 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.

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. 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:

- 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 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. 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. 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.

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.