



Effective 2014/2015

Career Cluster ►



Career Pathway ►

Maintenance,  
Installation & Repair

**INDUSTRIAL MECHANICAL TECHNICIAN**

(10-462-1)

Associate of Applied Science Degree  
Most Courses Offered at Racine Campus

<sup>Δ</sup> Suggested Sequence	✓	Course Number	Course Title	Requisites	Credits	Hrs/Wk Lec - Lab	
Semester 1		442-102	Introduction to Welding		2	0-4	
		462-101	* Maintenance Machining	Prereq: 834-110; Coreq: 606-121 (See Note 1)	3	0-6	
		606-121	Blueprint/Schematic Interpretation	Prereq: 834-110 (See Note 1)	2	2-0	
		628-109	* Mechanical Skills for Technicians		3	1-4	
		801-196	Oral/Interpersonal Communication	Prereq: 838-105 (See Note 1)	3	3-0	
Semester 2		605-113	* DC/AC I		3	2-2	
		612-102	Pneumatics/Hydraulics Intro		3	2-2	
		620-103	* Intro to Industrial Controls		4	2-4	
		801-136	English Composition 1	Prereq: 831-103 (See Note 1)	3	3-0	
		804-115	College Technical Math 1	Prereq: 834-110 (See Note 1)	5	5-0	
Semester 3		462-103	* Mechanical Power Transmission	Prereq: 628-109	3	1-4	
		462-104	* Machine & Equipment Installation	Prereq: 606-121	3	1-4	
		620-140	* Programmable Logic Controllers	Prereq: 605-113	2	1-2	
		806-154	General Physics 1	Prereq: 804-115	4	3-2	
		809-198	Psychology, Introduction to	Prereq: 838-105 (See Note 1)	3	3-0	
Semester 4		462-102	* Preventative/Predictive Maintenance	Coreq: 462-103	3	2-2	
		462-105	* Robotics/Material Handling Systems	Coreq: 620-104	3	2-2	
		462-106	* Capstone Project	Coreq: 462-104; 462-105	5	2-6	
		620-104	* Electrohydraulic / Mech Systems	Prereq: 462-103; 620-103	3	2-2	
		809-196	Sociology, Introduction to	Prereq: 838-105 (See Note 1)	3	3-0	
Electives		Take 6 elective credits. Any associate degree level course may be taken as an elective.				6	

**Minimum Program Credits Total Required**

**69**

<sup>Δ</sup> Courses may be taken out of suggested sequence as long as requisites have been met.



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**PROGRAM DESCRIPTION**

Industrial Mechanical Technicians are required to operate, repair, and maintain machinery and equipment in an industrial environment. You will be introduced to industrial mechanical maintenance utilizing both classroom and lab experiences, including metal fabrication, machining, materials science, hydraulics, lubrication, pipefitting, welding, graphics, and electrical controls. You will also learn concepts of component selection, power transmission application, repair and replacement of failed components, alignment, failure analysis, and preventative and predictive maintenance techniques. Successful graduates will be well prepared for an entry level position in industrial maintenance, entrance into a skilled trade, or the opportunity to enhance a skilled trade with an associate degree.

**PROGRAM LEARNING OUTCOMES**

Graduates of the Industrial Mechanical Tech Associate Degree Program should be able to:

1. Demonstrate technical proficiency for mechanical repair.
2. Use precision measuring equipment.
3. Analyze machine malfunctions and develop an appropriate repair as a member of a team.
4. Demonstrate basic knowledge of machine tool programming.
5. Identify various types of bearings and their application in industrial machinery.

**CORE ABILITIES**

Gateway believes students need both technical knowledge and skills and core abilities in order to succeed in a career and in life. The following nine core abilities are the general attitudes and skills promoted and assessed by all Gateway programs. All Gateway graduates should be able to:

- |  |   |
|--|---|
| 1. Act responsibly                           | 5. Develop job seeking skills                                       |
| 2. Communicate clearly and effectively       | 6. Respect themselves and others as a member of a diverse community |
| 3. Demonstrate essential computer skills     | 7. Think critically and creatively                                  |
| 4. Demonstrate essential mathematical skills | 8. Work cooperatively   |
|  | 9. Value learning   |

**ADMISSION REQUIREMENTS**

1. Students must submit an application & \$30 fee.
2. Students must complete reading, writing, math, and computer skills placement assessments.
3. Students must submit official high school, GED, or HSED transcript.

**GRADUATION REQUIREMENTS**

1. Minimum 69 credits with an average 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.*

**NOTES**

1. A satisfactory placement test score (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 needed, please allow a minimum of 90 days. Safety shoes (steel toe leather high top) are also required in most labs.
3. Any course may be taken prior to entry in the program, assuming prerequisites and corequisites have been satisfied (or waived with department approval).

**OTHER INFORMATION**

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 the Master Class Schedule 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.

**EQUAL OPPORTUNITY/ACCESS EDUCATOR / EMPLOYER**  
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To schedule an appointment with an advisor, please call 1-800-247-7122.

For a complete list of course descriptions (and possible online courses) for this program, please consult Web Advisor on our web page at [www.gtc.edu](http://www.gtc.edu).

My advisor is \_\_\_\_\_ My advisor's contact information is \_\_\_\_\_