

Industrial Mechanic

Industrial Mechanic I Certificate of Achievement

The Industrial Mechanic I Certificate program is modeled after local industry competency standards. The program includes study in the following areas: power transmission, hydraulics, pneumatics, centrifugal pumps, electrical theory and components for the industrial maintenance mechanic and industrial safety in manufacturing. This program prepares students for entry level positions in Industrial Maintenance Mechanic, Industrial Maintenance Technician, Process Maintenance Technician, Plant Maintenance Mechanic, and Building Maintenance Mechanic.

Upon successful completion of the program, students will be able to:

- demonstrate proficiency of safety principles required for industrial employment.
- demonstrate proficiency in basic electrical systems for industrial equipment.
- demonstrate proficiency in power transmission systems.
- demonstrate an understanding of industrial manufacturing.
- demonstrate an understanding of hydraulic and pneumatic systems.
- demonstrate an understanding of centrifugal pumps.
- demonstrate problem solving skills used in industrial manufacturing environments.

| Course # | Title | Units |
|------------------------------|--|-----------|
| Required Core Courses | | |
| MM 051A | Introduction to Industrial Mechanics | 3 |
| MM 051B | Mathematics for Machine Technology | 3 |
| MM 051C | Electrical for the Industrial Mechanic | 3 |
| MM 051D | Power Transmission System 1 | 3 |
| MM 051E | Hydraulic and Pneumatic Systems 1 | 3 |
| MM 051F | Pump Systems 1 | 3 |
| MM 054 | Welding Fundamentals | 3 |
| ITEC 015X | Occupational Work Experience Education | 1 - 8 |
| | Total | 23 |

*This is a **recommended sequence** of courses for timely completion of this program. Please see your counselor to formalize your personalized educational plan or for alternative planning.*

| SEMESTER 1 | | SEMESTER 2 | |
|------------------|-----------|------------------|-----------|
| MM-051A | 3 | MM-051C | 3 |
| MM-051B | 3 | MM-051D | 3 |
| MM-054B | 3 | MM-054E | 3 |
| ITEC-0015X | 1 | MM-051F | 3 |
| | 10 | ITEC-0015X | 1 |
| | | | 13 |