

# 2023-2024 TTC Catalog - Industrial Mechanics (IMT)

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## **IMT 001 - Non Equivalent Industrial Mechanics Credit**

**Lec:** 0 **Lab:** 0 **Credit:** \*

Indicates credit given for industrial mechanics course work transferred from another college or through other approved documented methods, for which there is no equivalent course at TTC. \*Hours vary depending on external course.

**Division:** Manufacturing and Maintenance

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## **IMT 106 - Fundamentals of Industrial Technology**

**Lec:** 2.5 **Lab:** 1.5 **Credit:** 3.0

### **Course Offered**

Fall

This course is a study of basic industrial topics, including teamwork, blueprint reading, and problem solving in an integrated format.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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## **IMT 115 - Industrial Schematics**

**Lec:** 3.0 **Lab:** 0 **Credit:** 3.0

### **Course Offered**

Fall

This course covers the interpretation of mechanical, fluid power, piping and electrical schematics.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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## **IMT 127 - Industrial Pumps**

**Lec:** 2.0 **Lab:** 3.0 **Credit:** 3.0

### **Course Offered**

Fall

This course introduces students to the principles of pumps including various commercial and industrial pumps and pumping systems with setups to calculate and measure pressure, flow and velocity of fluids within pumping systems.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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## **IMT 131 - Hydraulics and Pneumatics**

**Lec:** 2.5 **Lab:** 4.5 **Credit:** 4.0

### **Course Offered**

Fall

This course covers the basic technology and principles of hydraulics and pneumatics.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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## **IMT 132 - Hydraulics**

**Lec:** 1.0 **Lab:** 3.0 **Credit:** 2.0

### **Course Offered**

Fall

Spring

This course is a study of basic hydraulic terminology and principles of hydraulics and pneumatics.

**Grade Type:** Letter Grade

**Division:** Engineering and Construction

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## **IMT 133 - Pneumatics**

**Lec:** 1.0 **Lab:** 3.0 **Credit:** 2.0

### **Course Offered**

Fall

Spring

This course is a study of basic pneumatic terminology and principles for industrial applications.

**Prerequisite**

IMT 132

**Grade Type:** Letter Grade

**Division:** Engineering and Construction

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## **IMT 140 - Industrial Electricity**

**Lec:** 4.5 **Lab:** 1.5 **Credit:** 5.0

**Course Offered**

Fall

This course covers basic electrical fundamentals, including measuring devices, circuitry and controls for industrial circuits.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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## **IMT 151 - Piping Systems**

**Lec:** 2.0 **Lab:** 3.0 **Credit:** 3.0

**Course Offered**

Fall

Summer

This course covers plumbing and piping systems used in industrial, commercial and/or residential construction. Emphasis will be placed on the reading and sketching of piping schematics as well as the fabrication and design of piping systems. This course will also include pump technology and valve maintenance.

**Corequisite**

IMT 127

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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## **IMT 160 - Preventive Maintenance**

**Lec:** 2.0 **Lab:** 3.0 **Credit:** 3.0

**Course Offered**

Fall  
Summer

This course covers preventive maintenance techniques, lubrication, bearing, mechanical troubleshooting and the use of computers in maintenance.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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**IMT 161 - Mechanical Power Applications**

**Lec:** 3.0 **Lab:** 3.0 **Credit:** 4.0

**Course Offered**

Fall  
Spring  
Summer

This course covers mechanical transmission devices, including procedures for installation, removal and maintenance. Emphasis is placed on drive systems consisting of belts and pulleys, chains and sprockets, and gear drives used to transmit power.

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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**IMT 163 - Problem Solving for Mechanical Applications**

**Lec:** 2.0 **Lab:** 3.0 **Credit:** 3.0

**Course Offered**

Fall  
Spring  
Summer

This course covers troubleshooting techniques such as critical thinking in mechanical situations, practical problem-solving techniques, root-cause analysis, and mechanical procedures with heavy emphasis on computational and analytical problem-solving skills.

**Prerequisite**

IMT 131

**Grade Type:** Letter Grade

**Division:** Manufacturing and Maintenance

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