

2020-2021 TTC Catalog - Industrial Mechanics (IMT)

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

IMT 104 - Schematics

Lec: 1.0 Lab: 3.0 Credit: 2.0

Course Offered

Fall

Spring

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

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

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

IMT 124 - Pumps

Lec: .5 **Lab:** 4.5 **Credit:** 2.0

Course Offered

Fall
Summer

This course covers packing, seals, couplings, alignment, bearings and rebuilding pumps.

Corequisite

IMT 151

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

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: Manufacturing and Maintenance

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: Manufacturing and Maintenance

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

IMT 151 - Piping Systems

Lec: 3.0 **Lab:** 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 124

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

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

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

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 132
and
IMT 133

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

IMT 210 - Basic Industrial Skills I

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

Course Offered

Summer

This course is designed to give students an introduction to basic safety, construction math, and hand tools as related to industrial applications. (Note: Course is aligned with NCCER modules 00101, 00102 and 00103.)

Grade Type: Letter Grade

Division: Manufacturing and Maintenance

IMT 211 - Basic Industrial Skills II

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

This course is designed to give students an introduction to power tools, blueprints and rigging. Students will learn basic communication and employability skills as related to industrial applications. (Note: Course is aligned with NCCER modules 00104, 00105, 00106, 00107 and 00108.)

Grade Type: Letter Grade

Division: Manufacturing and Maintenance
