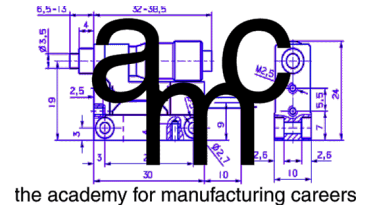


Academy for Manufacturing Careers

Machine Maintenance Certificate



Basic Gauges & Measurement – 2 credits - 32 hours

Prerequisite: Industrial Blueprint Reading

This course covers use of calipers, micrometers, English and metric gauges and other measuring instruments within a manufacturing environment. Topics include: English vs. metric, calibration of instruments, importance of repeatability, hands-on measurement of piece work, and instrument inspection and care.

Machine Maintenance & Troubleshooting – 3 credits – 48 hours

This course covers methods and means used to troubleshoot and maintain machines typically found in a manufacturing environment. Problem symptoms, problem identification, maintenance records and systems will be covered.

Basic Industrial Electricity – 2 credits – 32 hours

This course is designed to give maintenance people a basic understanding of safely working with and around electricity in an industrial environment. The course topics include: electrical theory, power and control circuits, DC and AC, batteries' inductance, capacitance, transformers, measuring of circuits, lighting, machines, single and three phase motors, control circuits and components, and maintenance procedures.

Drive Components & Bearings – 2 credits – 32 hours

This course instructs students in the principles, applications, and maintenance of various types of bearings and mechanical couplings, including ball and roller, powdered metal, non-metallic, hydrostatic bearings; couplings: such as shear, torque limiting, floating and insulated, speed reducers, seals and gears.

Industrial Hydraulics & Pneumatics – 4 credits – 64 hours

This course provides instruction in the basics of hydraulic and pneumatic systems including pumps, valving, control assemblies, and actuators. A general understanding of basic laws and formulas used in simple hydraulic circuits, including standard hydraulic symbols, and maintenance procedures will be provided.

NOTICE OF NONDISCRIMINATORY POLICY AS TO STUDENTS

The Academy for Manufacturing Careers admits students of any race, color, national and ethnic origin, ancestry, religious creed, age, disability, marital status, sexual orientation, gender, or gender expression to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, national and ethnic origin, ancestry, religious creed, age, disability, marital status, sexual orientation, gender, or gender expression in administration of its educational policies, admissions policies, scholarship and loan programs, and any other school-administered programs.



Jackson Area
Manufacturers Association
Helping Manufacturers Succeed & Grow Since 1937

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