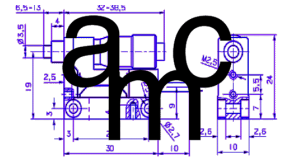


Academy for Manufacturing Careers

CNC Certificate



the academy for manufacturing careers

Industrial Blueprint Reading – 2 credits - 32 hours

This course provides the understanding and interpretation of a variety of mechanical and electrical blueprints. Emphasis is placed on reading and interpreting blueprints found in a manufacturing environment. Student will gain the ability to recognize and identify symbols and specifications common to modern industrial blueprints. Topics include: lines and symbols, views, material, form and position, title blocks, sketching, features, and sections.

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.

Machining Theory & Methods – 4 credits -64 hours

Prerequisite: Basic Gauges & Measurement

A basic course in machining theory and an introduction to the use of common tools and techniques in manufacturing. Topics introduced include: turning, boring, drilling, milling, grinding, use of hand tools, machine setup, preventative maintenance, efficient operation of tools, and use of the Machinery Handbook.

Precision Machining Methods – 2 credits - 32 hours

Prerequisite: Machining Theory & Methods

This course covers the basics of precision machining operations utilizing a variety of machine tools and related equipment. Topics include: operation and use of drill presses, lathes, power saws, grinders, vertical and horizontal milling machines, and other basic machine tools; bench work (use of hand and power hack saws, deburring, shearing, filing, polishing, use of hand taps, and cutting threads with a die); safety; and good housekeeping.

CNC Mill Theory & Programming - 2 credits – 32 hours

Prerequisite: Precision Machining Methods

This course introduces the students to the theories and basic programming fundamentals of the Computerized Numerical Controlled Mill process.

CNC Lathe Theory & Programming– 2 credits – 32 hours

Prerequisite: CNC Mill Theory & Programming

This course introduces the students to the theories and basic programming fundamentals of the Computerized Numerical Controlled Lathe process.

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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