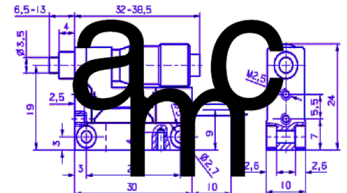


Academy for Manufacturing Careers

Prototype Technician Apprenticeship



the academy for manufacturing careers

Apprentices will learn the necessary skills and earn a journeyman's certification for a Prototype Technician using the latest tools in this four year, Department of Labor registered technical instruction program.



Core Classes

Industrial Blue Print Reading
Algebra
Machining Theory & Methods
Basic Gauges & Measurement
Materials/Metallurgy
Basic Industrial Electricity
Problem Solving/Lean

Industry standards, automotive OEM requirements, best practices, and requests for this training by our local manufacturers all continue to show the need for this training.

Track Specific

Intermediate Blueprint Reading/GD&T
Intro to CAD
Welding I
Welding II
Moldmaking
Die Theory & Design
CNC Mill Theory & Programming
CNC Lathe Theory & Programming
Machine Maintenance & Troubleshooting
Sheet Metal Basics

A variety of classroom instruction formats including lecture, PowerPoint, group discussion, and group exercises gives the student maximum hands-on learning opportunities.

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.



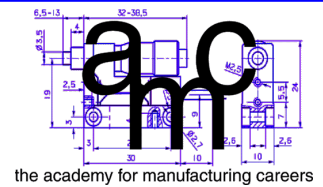
Jackson Area
Manufacturers Association
Helping Manufacturers Succeed & Grow Since 1937

Academy for Manufacturing Careers
2545 Spring Arbor Road, Suite 201
Jackson, MI 49203

Phone: 517-782-8268
Fax: 517-435-4126
E-mail: jama@mijama.org

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Prototype Technician Apprenticeship



Machine Maintenance & Troubleshooting

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.

Welding I

This course covers basic theory and fundamental application of welding as required in the metal fabrication industry. The class includes: development of basic skills in preparation, welding and cutting of metal and provides hands-on experience within shielded metal arc welding and oxy-acetylene welding.

Intermediate Blueprint Reading/GD&T

Geometric Dimensioning and Tolerancing covers the fundamentals of GD&T concepts, and teaches how to read and interpret prints with GD&T symbols. Content is based upon ANSI/ASME Y 14.5M-2009 standards.

CNC Lathe Theory & Programming

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

Welding II

This course provides GMAW (gas metal arc welding formally known as MIG welding) and GTAW (gas tungsten arc welding formally known as TIG welding) processes and techniques. Topics will include: safety, use of equipment, power sources, shielding gases, filler metals, weld-

Intro to CAD

This course introduces students to computer aided drafting using AutoCAD.

Sheet Metal Basics

This course covers the basics of sheet metal.

Moldmaking

This course provides the basic fundamentals of mold design and construction.

CNC Mill Theory & Programming

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

Die Theory & Design

This course covers techniques of die design theory and practice. Students will study forming and cutting of dies and their component parts, such as die blocks, strippers, stock guides, shredders, knockouts, nest gages, pushers, die stops, strip layout die sets, stock utilization and engineering formulas. Students will be required to complete a die design project.



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