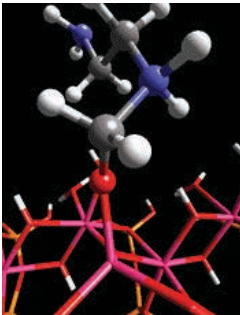




CNC Machining and Composites Manufacturing Program



Program Description:

This program provides a competency award to students who wish to acquire skills in the manufacturing processes involving composites, polymers and injection molded parts. The precision machining component places an emphasis on the use of manual machine tools, blueprint reading, shop math, precision measuring instruments, and the setup, programming and operation of computer numerically controlled (CNC) machines. Individuals can earn up to 27 credits toward an associate degree in applied industrial technology (AIT).

Audience:

Individuals interested in a career in manufacturing with an emphasis on composites, polymers, injection molding, machining and computer numerical control (CNC) machining.

Topics Covered:

- Understand the types of composites and polymers used in manufacturing precision components
- Operate injection molding equipment
- Operate conventional machine tools, milling machines, lathes and surface grinders in a safe and efficient manner
- Program, set up and operate computer numerical control (CNC) milling and turning centers
- Use precision-measuring instruments such as micrometers and calipers to inspect parts for conformance to design
- Read blueprints and engineering drawings
- Utilize teamwork, communications and safety in a manufacturing environment

Program Prerequisite(s):

- High school diploma or GED
- COMPASS assessment for college-level mathematics and reading may be required

Courses Requirements:

Course Name:	Course	Credit Hrs
Mechanical and Spatial Relations	ATMT 1000	4
Basic Manufacturing Skills I	ATMT 1100	3
Manufacturing Skills II	ATMT 1110	2
Machine Operations Lab I	ATMT 1120	6
Machine Tool Theory	ATMT 1200	4
Manufacturing Procedures	ATMT 1300	2
Machine Operations Lab II	ATMT 2120	6

Upon Completion:

- Earn a Competency Award from the Workforce & Economic Development Division (WEDD)
- Be prepared to compete for positions as an injection molding technician, manual machinist, CNC operator, machine tool operator, CNC machinist or CNC programmer

Financial Aid:

Financial assistance, in the form of grants, scholarships, and other funding resources may be available. Contact the Student Financial Aid & Scholarships Office for more information.

Start Dates: May and September

Information: 216-987-3058