

COMPOSITES MANUFACTURING (CERT)

CERTIFICATE OF ACHIEVEMENT

The Plastics Manufacturing Technology Program provides the diverse student body in the surrounding regional community with advanced education in plastics manufacturing technology and serves as a bridge between students who seek job skills, industry certifications or an Associate of Arts for employment. The Program provides a high quality of instruction to achieve its objectives. The Certificate of Achievement in Composites Manufacturing allows the student to learn specific techniques related to composite fabrication, fiberglass technology, resin transfer, and how to repair potential manufacturing defects. The student also learns the basics of plastics technology and how this relates to blueprints prepared by engineers.

Program Student Learning Outcomes

- Student demonstrate safe work habits around plastics machinery.
- Students communicate clear technical instructions.
- Students differentiate between the various types of plastic.
- Students employ shop drawings to produce plastic parts to drawing specifications.
- Students identify the specific applications of plastic resign systems.
- Students recognize the process for manufacturing various plastic parts.
- Students use percentages to mix resigns, fillers, and colors.
- Students utilize ratios and fractions to mix materials.

Program Requirements

Code Number	Course Title	Units
Required Courses		
ENGT 111	Plastics Technology	3.0
ENGT 116	Blueprint Reading and Production	4.0
ENGT 117	Geometrical Dimensioning and Tolerancing and Model Based Definition	4.0
ENGT 250	Fiberglass and Vacuum Infusion Process Technology	3.0-4.5
or ENGT 251	Composites Fabrication and Tooling	
ENGT 103	Introduction to Engineering Design Using Inventor	3.0-4.0
or ENGT 131	Design Fundamentals Including 3D Modeling	
or ENGT 259	Solidworks Introduction	
Total Units		17-19.5