Computer Numeric Controlled (CNC) Machinist Technology

Certificate

This major prepares students for gainful employment in general machine shops and CNC manufacturing. This is an assessment based certificate where students are evaluated on their ability to demonstrate their knowledge and experience in all the topics of study. Topics include safety, blueprint reading, Geometric Dimensioning and Tolerancing (GD&T), machining a work piece to drawing specification, use of computer aided design software to create drawings, programming, and set-up of CNC lathes and milling machines, using G-Code and CAM, proper tooling and work-holding methods, speeds and feeds, and metal cutting theory. After students complete the minimum skills required in their assessment books, they continue their training by developing their own advanced machining projects. These projects include design, manufacturing, and evaluation of their own product ideas.

Total Credit Hours: 35

First Semester

MT291 Introduction to Machining	4.0
MT292 Introduction to CNC Milling	4.0
MT294 Intro to CNC Turning Centers	4.0
MT114 Manufacturing Processes	3.0

Second Semester

MT295 Advanced CNC Turning Centers	4.0
MT296 Multi-Axis CNC Machining	4.0
MT297 CNC Capstone	4.0
MT279 Sheet Metal Fabrication	3.0