CNC Machining and Programming Certificate

Program: Computer Aided Drafting
Program Code:
CM
Academic Area:
Science, Technology, Engineering and Mathematics
Type:
Certificate of Recognition
CIP Code:
48.0510

Program Statement

Students learn to use standard machine-shop equipment and operate and program CNC machinery to become manufacturing technicians. Students also understand the materials to be processed and technical drawing through the use of AutoCAD.

Program Information

- This program serves as a solid basis for continuing on toward a degree. All courses apply to the college's degree programs in Automation, Electro-Mechanical and Mechanical Technology.
- This program utilizes Bristol's NSF-funded Computer-Integrated Manufacturing (CIM) Laboratory facility, utilizing typical industrial CNC machining centers.

Program Requirements

Course #	Title	Credits
EGR 172	Material Science	4
	CAD 101, CAD 111, CAD 112 or CAD 172	3
	CAD 211, EGR 111 or EGR 112	6-7

Recommended Course Sequence - Semester 1

Course #	Title	Credits
	CAD 101, CAD 111, CAD 112 or CAD 172	3
	EGR 111, EGR 112 or EGR 172	3-4

Recommended Course Sequence - Semester 2

Course #	Title	Credits
	CAD 211, EGR 111, EGR 112 or EGR 172	6-8
	Total credits:	**13-14**

Category Descriptions

CAD 101, CAD 111, CAD 112 or CAD 172

Credits: 3

Choose one of the following:

Course #	Title	Credits
CAD 101	Computer Aided Drafting	3
CAD 111	Mechanical Design with Solidworks	3
CAD 112	Maker Space Projects and Advanced Mechanical Design with SolidWorks	3
CAD 172	Mechanical Design Using Inventor	3

CAD 211, EGR 111 or EGR 112

Credits: 6-7

Choose two of the following:

Course #	Title	Credits
CAD 211	Computer Aided Manufacturing	3
EGR 111	Fundamentals of Manual Machining	4
EGR 112	Automated Machining	3