Computer Aided Design & Manufacturing Certificate

Program Goals Statement

This certificate program provides students with the needed skills to become a professional computer-aided draftsperson, mechanical, or manufacturing technicians in the engineering industry. Students learn fundamental concepts of engineering drawing through advanced computer-aided design techniques and CAD/CAM. They will utilize and set up standard machine-shop equipment and operate and program CNC machinery. Students also understand the materials to be processed and technical drawing through the use of AutoCAD, SolidWorks, Inventor, and CamWorks.

Program Information

- This program serves as a solid base for continuing on toward a degree with all courses transferring to BCC's Automation, Electro-Mechanical, and Mechanical Technology programs.
- Students utilize typical industrial CNC machining centers, high-tech computer equipment, and the latest AutoDesk, SolidWorks, and/or CAM software.

Subject: Computer Aided Drafting
Type: Certificate

Campus

Campus:
Fall River
Item #
Title
Credits

Program Requirements

Item #	Title	Credits
CAD 111	Mechanical Design with Solidworks	3
CAD 211	Computer Aided Manufacturing	3
EGR 111	Fundamentals of Manual Machining	4
EGR 112	Automated Machining	3
EGR 172	Material Science	4

Choose two from the following

Item #	Title	Credits
CAD 101	Computer Aided Drafting	3
CAD 112	Advanced Mechanical Design with Solidworks	3
CAD 172	Mechanical Design using Inventor	3

Recommended Course Sequence - Semester 1

Item #	Title	Credits
CAD 111	Mechanical Design with Solidworks	3
EGR 111	Fundamentals of Manual Machining	4
EGR 172	Material Science	4
	CAD 101 or CAD 172	3

Recommended Course Sequence - Semester 2

Item #	Title	Credits
CAD 211	Computer Aided Manufacturing	3
EGR 112	Automated Machining	3
	CAD 101 or CAD 112 or CAD 172	3
	Total credits:	**23**