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Columbia Basin College



Machine TECHNOLOGY



MACHINE TECHNOLOGY:

Skills for an indispensable career

Build Skills. Meet Goals. Begin Your Career.



Machine TECHNOLOGY



THE BACKBONE OF INDUSTRY

From the wing of an airplane to a surgical implant that stabilizes a bone fracture, machinists play an integral role in improving lives and contributing to society's technological progress. The demand for high tech products such as cell phones and MP3 players has contributed to a surge in U.S. manufacturing. With recent advances in machine technology and with computers now playing a part in the machinist's day-to-day process, the industry is expanding, creating more job opportunities for skilled employees.

CURRICULUM

The Machine Technology department at CBC is designed to build knowledge and skills that are useful to students interested in becoming machinists, mechanical engineers, or quality assurance inspectors. Machine Technology curriculum includes trade support theory courses in conjunction with laboratory training and general education courses.

AAS DEGREE IN MACHINE TECHNOLOGY

This two-year degree program requires students to successfully complete department courses as well as general education requirements, including courses in math and English. A minimum grade of 2.0 is required for successful completion of major courses.

Students who earn their AAS degree are prepared for careers in numerous industries as well as continued education at a four-year university.

AT THE END OF THE PROGRAM, SUCCESSFUL STUDENTS WILL BE ABLE TO:

- ⚙️ demonstrate manual machining skills (operation of lathes, milling machines and surface grinders) and blueprint reading skills
- ⚙️ operate high tech equipment such as computer numerically controlled machines (CNC)
- ⚙️ demonstrate skills in computer-aided design (CAD), solid modeling, and computer-aided manufacturing (CAM)
- ⚙️ use math and problem-solving skills

FIRST-YEAR CLASSES are devoted to teaching students how to safely operate lathes, milling machines, grinding machines, and band saws. Students build projects, which are based on nationally approved competencies, to develop specific skill sets.

SECOND-YEAR CLASSES focus on the programming, setup, and operation of computer numerically controlled machines (CNC). Students will be exposed to G&M code programming, computer - aided manufacturing software (CAM), as well as computer - aided design (CAD), and solid modeling software.



JOB AND CAREER OUTLOOK

With increasing numbers of employees entering retirement and limited numbers of students entering training programs, employers are experiencing difficulty finding skilled, knowledgeable, and qualified employees. In addition, industry and technology are constantly evolving and expanding, and the need for machinists, especially computer-control programmers and operators, is on the rise.

WITH A BACKGROUND IN MACHINE TECHNOLOGY, YOU MAY WORK AS A:

Machinist	Tool and Die Machinist
CNC Machinist	Model Maker
CNC Programmer	CAD/CAM Designer and Programmer
CNC Setup Person	R&D Machinist
CNC Operator	Millwright
Quality Control Inspector	



STUDENT TESTIMONIAL

After relocating to the Tri-Cities due to the ongoing war in his home country of Bosnia, Dule Mehic found gaining employment in his area of expertise, mechanical engineering, difficult. Dule enrolled in Machine Technology courses at CBC, and with the encouragement and help of his instructors, secured employment at a local surgical implant manufacturer. Dule is currently the organization's primary engineer. "I've either designed or had a part in the design of every product," he says. Dule's successes continue to mount. He and his business partner recently founded an engineering consulting firm. In 2006, one of the company's products was selected by **R&D**

Magazine as "One of the 100 Most Technologically Significant New Products of the Year."



“It's very important to enjoy your work and going to work every day. Now everything is complete. I love coming to work.”

DULE MEHIC
Former CBC Student
Design Engineer, SIGN
Co-Owner, Intellegation, LLC

CONTACT US AT:

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