

## Machining (Industrial Technology - Machining)

- **Associate of Technical Science Degree**
- **Certificate of Completion**

WVC's Industrial Technology Machining Program is designed to meet the needs of those entering or working in the machining industry. With advances in machine and computer technology, the machining industry is undergoing change and creating job opportunities for skilled employees.

The machining program will provide students with foundational machining skills and experiences using current machining technologies and techniques. A graduate of the program will be prepared for entry into the machining industry as a conventional (manual) or CNC (computer numerical control) machinist. Instruction covers conventional turning, milling and grinding, as well as basic programming, set up and operation of CNC machine tools. Other subjects include shop safety, reading engineering drawings, shop mathematics, machine tool theory, as well as lean manufacturing and other skills currently required by the machining/manufacturing industry. In addition, students will be required to complete a job shadowing experience and a program culmination capstone project.

This program offers a two-year associate of technical science degree as well as a certificate of completion in conventional (manual) machining that can be completed in one year. Both are designed to prepare students by integrating theory and practical applications for immediate employment in the machining industry.

To be eligible for the ATS degree or certificate, students must earn a grade of "C" (2.0) or better in all required program core courses and maintain a cumulative 2.0 grade point average.

### Required Course Sequence:

*Associate of Technical Science Degree (first and second years)*

*Certificate of Completion (all first-year classes)*

*Offered at Wenatchee campus*

#### First Year

Fall Quarter		Credits
INDT 105	Machining Technology I.....	10
ENGR 102	Engineering Graphics and Design .....	4
BCT 116	Professional Work Relations.....	3

#### Winter Quarter

INDT 115	Machining Technology II .....	10
OCED 102*	Writing in the Workplace/ Technical English .....	5

#### Spring Quarter

INDT 125	Machining Technology III.....	10
OCED 130	Industrial Safety .....	5
MATH 100T*	Technical Math or higher .....	5

**Total Credits for Certificate**                      **52**

#### Second Year

Fall Quarter		Credits
INDT 205	Machining Technology IV.....	10
CTS 110	Computer Hardware .....	5
WELD 128**	Basic Welding.....	3

#### Winter Quarter

INDT 215	Machining Technology V .....	10
ENGR 105	Computer Aided Design.....	5

#### Spring Quarter

INDT 225	Machining Technology VI.....	10
INDT 164	Plant Maintenance .....	5
ENGR 106	Advanced Computer Aided Design .....	4

#### Any quarter after completion of certificate

CWE 196	Coop. Work Experience: Job Shadow.....	1
CWE 296	Coop. Work Experience: Practicum .....	3

**Total Credits for Degree**                                      **108**

\*Placement score required.

\*\*Students may find it useful to take WELD 128 in winter quarter of the first year since it is a morning offering in winter and fall quarters.