# **Precision Machining and CNC Technology - AAS**

West Burlington Campus, and select courses available at the Keokuk Campus

### **Program Information**

The Precision Machining and CNC Technology program is designed to provide students with the skills necessary to enter the production environment as entry level computer numeric controls programmers or production technicians. The program provides broad theoretical and hands-on education for those seeking careers in the production field, emphasizing various levels of the production process.

Each level builds upon the previous section, continuing the students' education and knowledge base of the production process.

Students will learn skills in safety, 2D and 3D production design, machining and quality control with an emphasis placed on emerging trends including 5-axis design and machining principles.

The OSHA 10 General Industry card is awarded upon the successful completion of the MFG-212 course.

Please view the technical-standards for this course.

#### **Instructor and Staff**

Bradley Junker Instructor - Advanced Manufacturing (319) 208-5182 bjunker@scciowa.edu

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## **Program Requirements**

Fall Semester I CAD-101 Introduction to CAD DRF-113 Fundamentals of Technical Drafting MAT-702 Introduction to Math Applications MFG-212 Basic Machine Theory MFG-398 Introduction to Machine Shop SOC-114 Conflict Resolution in the Workplace	Credit 3 3 3 3 3
Spring Semester I MFG-142 Geometric Dimensioning Tolerancing CAD-277 3-D Dimensional (3-D) Modeling I EGT-116 Continuous Quality Management MFG-206 Manufacturing Processes I MFG-237 Introduction to Machine Trades Semester Total	Credit 3 3 3 3 3
Fall Semester II CAD-140 Parametric Solid Modeling MFG-156 Introduction to CNC Machining MFG-362 Machines Operations II PHY-106 Survey of Physics Semester Total	Credit 3 3 5.5 4 15.5
Spring Semester II SPC-112 Public Speaking MFG-303 Advanced CNC Programming MFG-323 Mastercam Designs Take 1 of 2 courses: ENG-105 Composition I ENG-110 Writing for the Workplace Semester Total	Credit 3 5.5 4 3 15.5
Program Total	64