

Course Objectives/Course Outline
Spokane Community College

Course Title: CNC Lab

Prefix and Course Number: MACH 248

Course Learning Outcomes:

By the end of this course, a student should be able to:

Learn Mastercam

- Geometry Creation
- Geometry manipulation
- Toolpath creation
- Toolpath application
- Program verification methods
- Post processing operations

Course Outline:

- I. Create Programs
 - A. Program readiness
 - B. Software
 - C. Set up sheets
 - D. Load and run programs
- II. Work-holding and Fixturing Options and Techniques
 - A. Set up and Operation of CNC Machines
 - B. Speed and Accuracy
 - C. PRZ
 - D. Tool Length Setting
 - E. Workpiece Holding
- III. Setup Steps and Procedures
 - A. Setup
 - B. Run
 - C. Inspect
 - D. Adjustments
 - E. Run
 - F. Inspect