Bemidji State University

TADD 3679: TAD LAB: CNC Metals

A. COURSE DESCRIPTION
   Credits: 2
   Lecture Hours/Week: 0
   Lab Hours/Week: 0
   OJT Hours/Week: *
   Prerequisites: None
   Corequisites: None
   MnTC Goals: None
   This course is designed to introduce students to vector-based cutting operations in metal. Students will apply knowledge gained in the classroom to sketch, create measured files in various software and execute their assignments using a variety of CNC equipment available to them.

B. COURSE EFFECTIVE DATES: 08/20/2022 - Present

C. OUTLINE OF MAJOR CONTENT AREAS
   1. Haas
   2. Fundamentals of CNC mill
   3. Fundamentals of CNC programming
   4. Tool Setting methods

D. LEARNING OUTCOMES (General)
   1. analyze various software allowing them to create their projects.
   2. plan and sketch their projects to create successful results.
   3. explain industry terms related to each process.
   4. develop a greater understanding for developing designs for large-scale production.
   5. demonstrate proper use of instruments such as layout tools, micrometers, and gauges.
   6. identify and set parameters.
   7. summarize the principles of measurements.
   8. demonstrate a workable knowledge of limits, fits, and tolerances.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted