

Bemidji State University

TADT 3462: Computer Controlled Machining

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 0

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Introduction to computer-controlled machining operations including manual programming and programming using CAM application for CNC (computer controlled machining). Emphasis on tools and materials are applied in a wide variety of manufacturing and modeling operations. Prerequisite: TADT 2461.

B. COURSE EFFECTIVE DATES: 08/22/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Operation of HAAS & Milltronic CNC mills, Mastercam programming software - writing & operation, reading/writing g-code
2. basics of fixture set-up/usage
3. sequential steps of machining
4. tool identification and set-up
5. troubleshooting and maintenance

D. LEARNING OUTCOMES (General)

1. . utilize oral, written and communication skills in the course environment.
2. . apply functional computer skills; including software utilization and applications to solve technical problems.
3. . use and interpret thoughts and ideas in a graphic form.
4. . plan and apply construction, manufacturing, modeling, mechanical, concepts and calculations to construct drawings.
5. . apply a fundamental operational knowledge of drawing processes used to produce components and machined parts.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted