

# Bemidji State University

## TADT 1464: Engineering Technology Project I

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This is a project based course that introduces fundamental concepts of engineering design, effective teams, lab safety, and engineering ethics. Basic mechanical systems and simple machines will also be covered. Students are required to demonstrate competency in scheduling, applying fabrication techniques, and documentation. Projects are presented at the end of the semester. Prerequisite: TADT 1210, PHYS 1101.

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

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Engineering Ethics
2. Group Roles and Effective Teams
3. Laboratory Notebook Practices
4. Laboratory Safety
5. Technical Presentation Skills

### D. LEARNING OUTCOMES (General)

1. . be able to incorporate various separating processes in their project designs.
2. . be able to calculate mechanical advantage for simple and compound machines.
3. . be able to maintain a laboratory notebook for lab and project work.
4. . be able to apply their knowledge of mechanics, fluids, and/or energy to project designs.
5. . be able to effectively use technology to deliver presentations of their work.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted