

# Bemidji State University

## TADT 4589: Advanced Prototype Project

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 0

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Capstone Project: Construct a highly detailed professional model utilizing a culmination of skills including traditional, non-traditional and 3D printing technologies. Project documentation will be a high priority. This project may be constructed in collaboration with an industry professional. Prerequisites: TADT 3470 and Senior level status or consent of instructor.

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

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Advanced level model construction
2. Courses related to equipment operation and lab safety

### D. LEARNING OUTCOMES (General)

1. . design and construct a professional prototype model.
2. . critique the design & construction of the model process.
3. . articulate problem solving and decision making skills in advanced project setting.
4. . assess human ergonomics as they relate to products, systems and services
5. . examine form/fit/function, materials and textures as they relate to customer interaction.
6. . examine the basics of manufacturability as it relates to product development.
7. . understand and demonstrate proper safety related to a lab environment.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted