TADT 4589: Advanced Prototype Project

A. COURSE DESCRIPTION
   Credits: 3
   Lecture Hours/Week: *.*
   Lab Hours/Week: *.*
   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