A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: *.*
Lab Hours/Week: *.*
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

Development of industrial quality prototypes from engineering or designer prints. Includes the selection of materials and processes for production feasibility and market testing prototypes. Prerequisites: Junior status or consent of instructor.

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

C. OUTLINE OF MAJOR CONTENT AREAS

1. Prototype Project
2. Turbo Project

D. LEARNING OUTCOMES (General)

1. develop an understanding of Rapid Prototyping Technologies and their impact on the field of Industrial Prototyping and the Model Making Profession
2. develop an understanding of the different employment options and opportunities in field of Industrial Prototyping
3. develop a realistic understanding of individual bidding, estimating, scheduling and construction of an Industrial Prototype within a given timeframe
4. develop an understanding of Traditional Prototyping Technologies and their impact on the field of Industrial Prototyping and the Model Making Profession
5. develop an understanding of and apply the correct terminology used for materials and processes that are commonly used in the Field of Industrial Prototyping
6. develop and apply advanced materials processing skills to the construction of Industrial Prototypes
7. develop and apply advanced problem solving skills to the design and construction of Industrial Prototypes
8. develop and apply written and verbal communication skills

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted