Bemidji State University

TADD 3240: Prototype Engineering & Detailing

A. COURSE DESCRIPTION

Credits: 2
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course is an in-depth look into the finishing and detailing process required of professional prototype models. A finished model must accurately resemble the final prototype in every aspect. Prototype Finishing and Detailing will cover project preparation using various materials, surface finishes/textures and the paints required for the finishing process such as primer, basecoat, single stage and clear coat. The technique of spray finishing will be explored and demonstrated utilizing aerosol, air brush and spray guns. The course will have a strong emphasis on shop safety, project management and professionalism.

B. COURSE EFFECTIVE DATES: 08/20/2022 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to product finishing.
2. Overview of the various finishing materials used in industry.
3. Quality presentation of their project construction.
4. Compile notebook of finishing processes and techniques.
5. Professionalism and safety related to model environment.

D. LEARNING OUTCOMES (General)

1. classify the various paints and materials used in the finishing industry.
2. create a mold to be used in the finishing process.
3. demonstrate and journal the techniques used in priming, sanding, and finishing.
4. demonstrate lab and personal safety.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted