

Minnesota State College Southeast

MDAD 1256: Design Project 1 for CAD Design

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites:

This course requires the following prerequisite

MDAD 1253 - Working Drawings 2 for CAD Design

Corequisites: None

MnTC Goals: None

This course is a design class that will focus on the design process. The student will gain confidence in his or her ability to apply sound product design parameters based on design considerations. A holistic approach will be used to incorporate the many functions of a designer in a company. The content goals of the course will change with the individual student's design. The course can be taken in conjunction with Design Project II or alone. (Prerequisite: MDAD1253) (3 credits: 3 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 01/24/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Analyze product design
2. Analyze manufacturing design
3. Analyze the designer's role
4. Analyze product parameters
5. Analyze industrial design
6. Analyze product complexity
7. Examine similar designs
8. Formulate design sequence
9. Contact consultants
10. Analyze power sources
11. Analyze product strength
12. Analyze product weight
13. Analyze safety
14. Analyze interchangeability
15. Analyze protective coatings
16. Calculate costs
17. Organize 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