MDAD 1254: Mold Design 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 1252 - Working Drawings 1 for CAD Design

Corequisites: None
MnTC Goals: None

The course will provide the student with a basic knowledge of mold design. This course covers the use of 3d parametric software to create plastic injection molds. The student will create two molds. Special note: The student is required to purchase a student version of Solidworks, Inventor, or equivalent 3d software.

(Prerequisites: MDAD1252) (3 credits: 3 credits/0 lab)

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

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Complete technical drawings that meet industry standards
2. Analyze core and cavities
3. Analyze draft on a model
4. Analyze shrinkage
5. Determine the parting lines
6. Analyze parting directions
7. Analyze sharp edges
8. Analyze shut-off surfaces
9. Apply mold repairs
10. Analyze runners and gates
11. Analyze mold cooling
12. Create complete mold designs

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted