MINNESOTA STATE COLLEGE SOUTHEAST

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