

Minnesota State College Southeast

MDAD 1208: Manufacturing Processes

A. COURSE DESCRIPTION

Credits: 5

Lecture Hours/Week: 5

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers manufacturing methods and materials. It includes machining, casting, molding, material selections, plastics, etc. This course also covers material handling, JIT, inventory reductions, etc. (Prerequisite: None) (5 credits: 5 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 04/27/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Analyze powder methods of change of form
2. Analyze process selection
3. Analyze properties of materials
4. Analyze measurements in manufacturing
5. Analyze mechanical methods of material removal
6. Analyze electrical methods of material removal
7. Analyze chemical methods of material removal
8. Analyze thermal and other methods of material removal
9. Analyze material selection
10. Analyze thermal methods of change of form
11. Analyze production control
12. Analyze mechanical and other methods of change of form
13. Analyze change of condition
14. Analyze adhesives
15. Analyze welding
16. Analyze mechanical methods of joining
17. Analyze mechanical surface finishing processes
18. Analyze surface treatment processes and coatings
19. Analyze manufacturing with plastics
20. Analyze manufacturing with composites
21. Analyze industrial safety and health
22. Analyze material addition

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted