

Bemidji State University

TADT 1220: Introduction to Manufacturing Processes II

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

A comprehensive study of the separating processes which occur in manufacturing production. Traditional and non-traditional processes are introduced, along with the primary materials which are utilized in the separation processes.

B. COURSE EFFECTIVE DATES: 08/22/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Processes as turning, drilling, milling, planing, surfacing, grinding, eroding, sawing, and non-traditional processes
2. Selected primary materials, along with testing and finishing techniques

D. LEARNING OUTCOMES (General)

1. gain an understanding of the major separating processes used in the manufacturing environment
2. experience several of the processes through actual use of equipment
3. demonstrate oral and written communication skills that are adequate for successful performance in the program's environment
4. demonstrate the ability to function as a team to solve related problems
5. demonstrate their ability to recognize ethical situations and make ethical decisions including environmental and global perspectives
6. demonstrate their ability to use a systematic method of problem solving and decision making
7. describe and recommend appropriate materials
8. understand and apply a fundamental operational knowledge of processes used to produce components and finished products
9. understand and apply a fundamental understanding of Maintenance
10. understand and apply a fundamental understanding of safety
11. understand and apply basic problem solving and design fundamentals as they relate to industrial problems including environmental and global concerns
12. understand and apply construction, manufacturing, modeling, mechanical, electrical, electronic, and fluid energy concepts and calculations
13. understand and apply the basic concepts of quality and quality assurance
14. understand the importance of safety in relation to separating processes

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted