

Miami University  
School of Engineering and Applied Science  
Department of Engineering Technology

<b>ENT 135</b>	<b>COMPUTER AIDED DRAFTING</b>	<b>3</b>
<b>Course Number</b>	<b>Title</b>	<b>Credit Hours</b>

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**DESCRIPTION:**

This course will provide the student with a basic understanding of computer drafting techniques using AutoCAD 2004 software. Microcomputer drafting software tools are explained and the creation of basic drawing are used to demonstrate these tools.

**PERIODS PER WEEK:** 2 Lecture, 1 Lab

**PREREQUISITE(S):** none

**CO-REQUISIRE(S):** none

**TEXT:**

**Applying AutoCAD 2004 , ISBN # 0-07-861216-0**

Terry T. Wohlers      Glencoe/McGraw-Hill 2005

**METHOD OF EVALUATION:**

The following is the distribution of credit for the required tasks:

Chapter Problems	60%
Notebook	10%
Project	10%
Midterm Exam	10%
Final Exam	10%
Total	100%

Homework assignments, lab reports, notebooks and papers will be due on the assigned date. Work will not be accepted later than the next class meeting unless a prior arrangement has been made.

**OBJECTIVES:**

Upon Completion of this course, students will be able to:

- (1) Demonstrate the ability to create detail engineering drawings of parts and assemblies.
- (2) Demonstrate proficiency in use of AutoCAD ® (AUTODESK) software to facilitate engineering problem solving.

**COURSE ASSESSMENT CRITERIA**

This is course is a constitute course and is therefore not directly assessed. It will contribute to **Outcome 1** “Knowledge of modern engineering computer aided design methods and techniques used in the graphical representation of mechanical components”

**ASSESSMENT TOOLS USED IN ENT 135**

Employer Surveys  
Graduate Surveys  
Student Evaluations  
Design/Lab Projects and Tests from ENT 235  
Instructor Course Evaluation Form from ENT 235

**Course Outline:**

<u>Week</u>	<u>Chapter and Topic</u>	<u>Chapters</u>
1	Introduction	1-4
2	Groundwork	5-8
3	Drawing Aids and Controls	9-11
4	Continued	12-14
5	Drawing and Editing	15-17
6	Continued	18-20
7	Drawing Setup and Printing	21-24
8	Midterm	
9	Dimensioning	25-26
10	Advanced Dimension and Tolerancing	27-28
11	Calculations and Groups	29-30
12	Blocks	31-32
13	Isometrics and 3D Introduction	1-2 Advanced
14	3D continued	3-5 Advanced
15	Design Project	
16	Design Project Presentations	
17	Final Exam	

**Miami University Learning Community:**

Miami University is committed to fostering a supportive learning environment for all students irrespective of individual differences in gender, race, national origin, religion, handicapping conditions, sexual preferences, or age. Students should expect, and help create, a learning environment free from all prejudice. Disparaging comments, sexist or racist humor, or questioning the academic commitment of students based upon these individual differences are behaviors that undermine our learning community. If such behaviors occur in class, please seek the assistance of your instructor or department chair.