APTECH 56 Course Outline as of Fall 2005

CATALOG INFORMATION

Dept and Nbr: APTECH 56 Title: COMPUTER DRAFTING
Full Title: Introduction to Computer-Aided Drafting
Last Reviewed: 8/14/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	2.00	8	Lecture Scheduled	16.00
Minimum	2.00	Lab Scheduled	3.00	4	Lab Scheduled	24.00
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	40.00
		Non-contact DHR	3.00		Non-contact DHR	24.00

Total Out of Class Hours: 32.00 Total Student Learning Hours: 96.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	39 - Total 2 Times
Also Listed As:	
Formerly:	ENGR 56

Catalog Description:
Introduction to computer-aided drafting utilizing the AutoCAD software program. Course will teach the student how to use this Windows-based commercial software to execute professional quality drafting/design work. Particular attention will be given to the components of a CAD system, the software interface, drawing set-up, geometric construction & editing, orthographic projection, dimensioning, plotting, and an introduction to 3-dimensional drafting/design.

Prerequisites/Corequisites:
Course Completion or Current Enrollment in APTE 45 (or APTECH 45 or APTECH 55 or IED 55)

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Intro to computer-aided drafting utilizing the AutoCAD software program. Areas covered include: drawing set-up, geometric construction & editing, orthographic projection, dimensioning, plotting, and an introduction to 3-dimensional drafting/design. Course will teach

students how to use this Windows-based commercial software to execute professional quality work. (Grade Only)
Prerequisites/Corequisites: Course Completion or Current Enrollment in APTE 45 (or APTECH 45 or APTECH 55 or IED 55)
Recommended:
Limits on Enrollment:
Transfer Credit: CSU;UC.
Repeatability: Total 2 Times

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Transferable	Effective:	Fall 1988	Inactive:
UC Transfer:	Transferable	Effective:	Fall 1999	Inactive:

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
The students will:
1. Define how a PC-CAD workstation is organized including types and functions of the workstation hardware.
2. Demonstrate how to access and use appropriate AutoCAD menus by:
   a. Tool Bars
   b. Pulldown menus
   c. by keyboarding.
   d. the mouse.
3. Illustrate how to use the following AutoCAD commands and settings by establishing or creating
   a. units and sheet size
   b. layers, linetypes and color.
   c. precise geometric entities
   d. dimensioning drawings.
   e. setting variables
   f. storing drawing elements.
   g. saving drawings.

Topics and Scope:

1. Introduction to the computer as a drafting/design tool with emphasis on hardward and software.
2. Using the AutoCAD software interface

3. Setting up a drawing and accessing drawing commands.
4. Editing the drawing.
5. Plotting and filing drawings.
6. Student/instructor created data base drawings.

Assignment:

1. Reading and written assignments as assigned by instructor.
2. AUTOCAD exercises and drawings.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Quizzes, DATA BASE DRAWINGS	Problem solving 5 - 35%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances, Performance exams, DATA BASE DRAWINGS	Skill Demonstrations 35 - 60%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion, COMPUTER GENERATED DRAWINGS	Exams 10 - 35%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:

1. AutoCad 2000: A Problem Solving Approach
   Sham Tickoo, AutoDesk Press 1999
2. Using AutoCad 2000
   Ralph Grabowski, AutoDesk Press 1999