

**COURSE OUTLINE**  
Loc Nguyen, 2012

DEPARTMENT:	Professional Technical Education
CURRICULUM:	CAD / DESIGN Technology
COURSE TITLE:	Introduction to AutoCAD 2-D
COURSE NUMBER:	TDR 131
TYPE OF COURSE:	Technical Preparatory
COURSE LENGTH:	1 quarter
CREDIT HOURS:	4
LECTURE HOURS:	22
LAB HOURS:	44
CLASS SIZE:	20
PREREQUISITES:	TDR 121 Drafting Technology I (or concurrent with)

**COURSE DESCRIPTION:**

The objectives of this course are to provide the students with an understanding of the features, limitations, and considerations associated with the operation of a computer-aided design/drafting (CAD) system. Students will gain valuable hands-on experience using the AutoCAD® PC-based CAD software.

**STUDENT LEARNING OUTCOMES ADDRESSED:**

1. Communication - Read and translate technical data relative to geometric spatial relationships into a graphical form easily understood by others with similar technical understanding.
2. Computation - Use basic mathematical operations as required defining geometrical spatial relationships.
3. Human Relations - Use social interactive skills to enhance learning through informal tutoring activities.
4. Critical Thinking and Problem Solving - Organize and evaluate technical data, as well as select and apply appropriate spatial relationship principles to determine problem solution.

STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

5. Technology - Select and use appropriate technological tools to create technical graphics.
6. Personal Responsibility - Take pride in own work
7. Information Literacy - Access & use information from variety of resources / data

**GENERAL COURSE OBJECTIVES:**

Upon completion of the course the student will be able to:

1. Identify CAD hardware components and system configuration
2. Operate the CAD workstation components including the computer, input/output devices.
3. Understand and explain the features, limitations, and considerations associated with the commands and characteristics of AutoCAD® .
4. Operate the AutoCAD® latest release software.
5. Create moderately detailed drawings.

**TOPICAL OUTLINE:**

	APPROX. HOURS
I. Course Overview	1
II. Basic Computer: Hardware and Software	5
III. Starting AutoCAD/drawing setup	12
IV. Cartesian Coordinate System	12
V. Drawing Basic Shapes	12
VI. Drawing Display Options	12
VII. Multiview Drawings	12
Total	<u>66</u>

Originated or Revised BY: L. NGUYEN  
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