### SYLLABUS PART I EDISON COMMUNITY COLLEGE MET 130S AUTOCAD I 3 CREDIT HOURS

#### COURSE DESCRIPTION

Introduction to the basics of computer-aided drafting using computer and textbook-based materials. Prerequisite: Basic computer operating knowledge or CIT 100S and EGR 110S. Lab fee: \$60.

# COURSE GOALS

The student will:		
		Program
		Outcomes
1.	Describe the components of a CAD system.	1
2.	Establish drawing parameters.	1
3.	Differentiate absolute, relative, and polar coordinate systems.	1
4.	Construct precise two-dimensional geometry.	1
5.	Construct geometry, notes, and dimensions on different layers.	1
6.	Establish line type patterns, weights, and colors.	1
7.	Produce text to a drawing using different fonts.	1
8.	Establish drawing limits and units of measure.	1
9.	Apply display control techniques while creating and editing two-	1
	dimensional geometry.	
10.	Produce plots of two-dimensional geometry, borders, and title blocks at	1
	various scale factors.	
11.	Complete geometric constructions.	1
12.	Complete section, isometric, and auxiliary views of objects.	1
13.	Apply ANSI standards to dimensions and tolerances.	1
14.	Create 3D wire frame solid model from a 2D drawing.	1
	1.         2.         3.         4.         5.         6.         7.         8.         9.         10.         11.         12.         13.         14.	<ol> <li>Describe the components of a CAD system.</li> <li>Establish drawing parameters.</li> <li>Differentiate absolute, relative, and polar coordinate systems.</li> <li>Construct precise two-dimensional geometry.</li> <li>Construct geometry, notes, and dimensions on different layers.</li> <li>Establish line type patterns, weights, and colors.</li> <li>Produce text to a drawing using different fonts.</li> <li>Establish drawing limits and units of measure.</li> <li>Apply display control techniques while creating and editing two-dimensional geometry.</li> <li>Produce plots of two-dimensional geometry, borders, and title blocks at various scale factors.</li> <li>Complete geometric constructions.</li> <li>Complete section, isometric, and auxiliary views of objects.</li> <li>Apply ANSI standards to dimensions and tolerances.</li> <li>Create 3D wire frame solid model from a 2D drawing.</li> </ol>

#### CORE VALUES

The Core Values are a set of principles, which guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

# TOPIC OUTLINE

- 1. Drawing basic entities
- 2. Coordinate Systems
- 3. Basic geometry editing techniques and selection sets
- 4. Precision drawing using object snaps
- 5. Drawing with grids and snap settings
- 6. Geometry editing commands
- 7. Controlling the display
- 8. Adding text to the drawing and controlling text format and fonts
- 9. Setting up drawing parameters and layers
- 10. Plotting drawings

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- 11. Scaling drawings
- 12. Geometric constructions
- 13. Multiview drawing and controlling linetypes
- 14. Dimensioning
- 15. Controlling the format of dimensions
- 16. Obtaining information from the drawing
- 17. Hatching section views
- 18. Isometric drawings
- 19. Creating auxiliary views