

JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Engineering Drawing w/AutoCAD

Course Abbreviation and Number: MCT 1240

Credit Hours: 4

Course Type: Lecture

Course Description: Students will focus on engineering drawing fundamentals, incorporating both manual and computer-aided drafting. Topics include free-hand sketching, principles of applied geometry, orthographic projections, dimensioning, section views, pictorials, conventional drawing practices, standards, tolerancing, and an introduction to 2-D wire frame software such as AutoCAD. Students will create and modify CAD geometry, text, and dimensions.

No requisites.

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Identify basic blueprint components.
 2. Insert, modify, and manipulate basic geometry using AutoCAD.
 3. Draw orthographic projections of three dimensional objects using proper conventions, alignment, dimensioning, and tolerancing with AutoCAD.
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Topical Covered:

- Drawing Components (including title block, zones, revision history, notes drawing area, etc.)
 - Orthographic Projections
 - Pictorial views
 - Sketching
 - Section views
 - Auxiliary views
 - Dimensioning and Tolerancing (in accordance with the latest edition of ASME Y14.5)
 - Print Reading
 - AutoCAD - Coordinate systems
 - AutoCAD - Geometry creation and modification tools
 - AutoCAD - Layers
 - AutoCAD - Model Space and Paper Space Usage
 - AutoCAD - Using template files and incorporating a drawing onto a title block/border
 - AutoCAD - Detailing (adding dimensions, notes, etc.)
 - AutoCAD - Publishing a completed drawing to a pdf file
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Information for Students

- Expectations of Students
 - [Civility Statement](#)
 - [Student Responsibility Statement](#)
 - [Academic Integrity Statement](#)
 - [Accessibility Services](#)
Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.
 - [Get Help: JCC & Community Resources](#)
 - [Emergency Closing Procedures](#)
 - Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A=4.0	B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0
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 - Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.
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Effective Date: Fall 2025