

**JAMESTOWN COMMUNITY COLLEGE**  
**State University of New York**

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**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.

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**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 – both manually and with AutoCAD.

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**Topical Covered:**

- Use of equipment
- Lettering
- Sketching & pictorial drawings
- Orthographic Projections
- Dimensioning
- Section views
- Auxiliary views
- Tolerancing
- AutoCAD – intro to CAD and two-dimensional wire frame
- AutoCAD – Coordinate systems & basic geometry insertion, snaps, grids, ortho/polar mode, and object snaps
- AutoCAD – Geometry modification, erase, trim/extend, move, copy, rotate, mirror, offset, and array
- AutoCAD – Layers, dimensioning
- AutoCAD - Detailing

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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 2021