

COMPUTER-AIDED DRAFTING (CAD)

MECHANICAL DESIGN CERTIFICATE

Program Code: E.CMD.CER

Certificate

Graduation requirement — 26–27 semester hours

The Computer-Aided Drafting: Mechanical Design certificate provides the student with an understanding of the machine design process and prepares the student for employment as a mechanical draft person working in a computer environment.

Suggested Full-time Sequence

| FALL | SPRING |
|---------------------|---------------------|
| <i>1st Semester</i> | <i>2nd Semester</i> |
| CAD 113 | CAD 119 |
| CAD 114 | MAT 131 |
| DRT 119 | ENG 101 or ENG 111 |
| CTC 110 | Technical elec |

Required Program Courses (16 hours) Cr. Hrs.

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|---------|--|---|
| CAD 113 | Computer-Aided Machine Design I | 4 |
| CAD 114 | Introduction to AutoCAD (Computer-Aided Drafting) | 2 |
| CAD 119 | Computer-Aided Machine Design II | 4 |
| DRT 119 | Blueprint Reading and Technical Drawing. | 3 |
| CTC 110 | Beginning Computers. | 3 |

Electives (3–4 hours)

Choose one course from the following:

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|---------|--|---|
| ELT 150 | Introduction to Electricity and Electronics. | 3 |
| MFT 113 | Introduction to Hydraulics and Pneumatics. | 3 |
| MFT 130 | Basic Machine Processes. | 3 |
| MFT 132 | Intermediate Machine Processes | 3 |
| MFT 137 | Introduction to CNC Programming | 4 |

Required General Education Courses (7 hours)

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|------------|-------------------------------|---|
| ENG 101 | Composition I | |
| or ENG 111 | Workplace Writing. | 3 |
| MAT 131 | Applied Mathematics | 4 |

Total Semester Credit Hours 26–27