

Computer Aided Design Technology - AAS

West Burlington Campus, and select courses available at the Keokuk Campus

Program Information

The Computer Aided Design (CAD) program provides students with the skills necessary to create detailed product and assembly drawings, as well as architectural blueprints. Students learn the process of visualizing and developing models in two and three dimensional environments. Several software programs are introduced and used to provide students with hands-on experiences with the tools utilized in the workforce. Students will earn an OSHA 10 General Industry credential upon completion of the first semester of the program.

Students may choose between two pathways in the CAD program: Career Pathway or Transfer Pathway.

The Career Pathway provides students with the skill set needed to go directly into the industry. Students are introduced to the CAD field during their internship. Successful completion of the CAD AAS program prepares the student for their full-time career.

The Transfer Pathway provides students with the education and technical skills and hands-on training needed to transfer to a four-year university for an advanced degree.

In Fall I semester, students have the option of taking MAT-120 and MAT-134 together, or MAT-702.

Please view the [technical standards](#) for this course.

Instructor and Staff

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Program Requirements

Fall Semester I	Credit
CAD-101 Introduction to CAD	3
DRF-113 Fundamentals of Technical Drafting	3
MFG-212 Basic Machine Theory	3
EGT-108 Principles of Engineering	3

Please choose between MAT-702 (3 credits) or MAT-120 and MAT-134 (6 credits):

MAT-134 Trigonometry and Analytic Geometry	3
MAT-120 College Algebra	3
MAT-702 Introduction to Math Applications	3
Semester Total.....	15-18

Spring Semester I	Credit
MFG-142 Geometric Dimensioning Tolerancing	3
CAD-277 3-D Dimensional (3-D) Modeling I	3
EGT-116 Continuous Quality Management	3

Take 1 of 2 courses:

SOC-114 Conflict Resolution in the Workplace	3
SOC-115 Social Problems	3

Take 1 of 2 courses:

ENG-105 Composition I	3
ENG-110 Writing for the Workplace	3
Semester Total.....	15

Summer Semester	Credit
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Take 1 of 2 courses:

ENG-106 Composition II	3
CAD-932 Internship	4
Semester Total.....	3-4

Fall Semester II	Credit
ARC-113 Architectural Drafting I	4
MFG-156 Introduction to CNC Machining	3

Take 1 of 2 courses:

CAD-140 Parametric Solid Modeling	3
EGT-400 PLTW - Introduction to Engineering Design	3

Take 1 of 2 courses:

PHY-106 Survey of Physics	4
PHY-162 College Physics I	4

Take SDV-134 as 1 credit:

SDV-134 CTE Employability Skills	1
Semester Total.....	15

Spring Semester II	Credit
ARC-129 Residential/Light Commercial Drafting	4
CAD-248 Parametric CAD II	3
CSC-110 Introduction to Computers	3
PHI-105 Introduction to Ethics	3
Semester Total.....	13

Program Total.....	61-65
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