

# COMPUTER AIDED DRAFTING (CAD) - ONE-YEAR CERTIFICATE OF COMPLETION (CC1)

## Description

The Computer Aided Drafting (CAD) certificate prepares students for entry-level employment in the drafting field. Students prepare for advanced CAD applications through an introductory set of CAD-based curriculum. Students will gain experience using dedicated architectural, civil, and mechanical software.

## Program Learning Outcomes

Upon successful completion of the program, students will be able to:

1. Integrate fundamental theoretical and conceptual considerations in design process and problem solving.
2. Present professional demeanor and attitude individually and collectively as a team member.
3. Recognize and follow professional protocol for industry standards appropriate to course level.
4. Demonstrate cogent oral, written, drafting and computational skills appropriate to the course content and course level.

## Entrance Requirements

### Academic Entrance Requirements

Recommended:

- High school diploma or GED
- Completion of WR 065 Rhetoric and Critical Thinking II or higher or minimum placement Wr/Comm Level 7
- Completion of MTH 060 Beginning Algebra or higher or minimum placement Math Level 10
- Basic computer competency or CIS 010 Computer Keyboarding and CIS 070 Introduction to Computers: Windows

### Other Entrance Requirements

All students enrolled in the program (which includes options for cooperative work experience) may have to pass a criminal history checks (CHC) as a condition of their acceptance into a worksite. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director or department chair.

## Additional Program Costs (Beyond Standard Tuition/Fees and Textbooks)

### Material Costs

Recommended:

- 32+ GB portable storage (USB or SSD drive): \$20 - \$100
- A desktop or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office: approximately \$800
- Reliable high-speed internet access

## Course Requirements

Course	Title	Credits
<b>Core Requirements</b>		
CIS 120	Computer Concepts	4
CIS 125A1	AutoCAD 1	4
CIS 125A2	AutoCAD 2	4
CIS 125V	Visio	4
CIS 135A1	AutoDESK Revit 1	4
CIS 135A2	AutoDESK Revit 2	4
CIS 135C1	AutoCAD Civil 3D	4
CIS 135S1	SolidWorks 1	4
CIS 135S2	SolidWorks 2	4
<b>Other Required Courses</b>		
<u>Human Relations:</u>		3-4
MTH 102	Applied Technical Mathematics (or choose one course from the foundational requirements math list)	4
WR 121	Academic Composition	4
<b>Total Credits</b>		<b>47-48</b>

## Advising Notes

Planning is important. Most option courses are offered once per academic year and many need to be taken in sequence. Some core classes are offered once every two years. Students may take non-program support courses any term to build skills related to prerequisites.

This program is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

## Performance Standards

- Academic Requirements:
  - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
  - All courses in the program must be completed with a grade of C or higher.

## Sample Plan

First Year		Credits
<b>Fall</b>		
CIS 120	Computer Concepts	4
CIS 125A1	AutoCAD 1	4
CIS 135S1	SolidWorks 1	4
CIS 125V	Visio	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
CIS 125A2	AutoCAD 2	4
CIS 135S2	SolidWorks 2	4

CIS 135A1	AutoDESK Revit 1	4
MTH 102	Applied Technical Mathematics (or choose one course from the foundational requirements math list)	4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
CIS 135A2	AutoDESK Revit 2	4
CIS 135C1	AutoCAD Civil 3D	4
<u>Human Relations:</u>		3-4
WR 121	Academic Composition	4
<b>Credits</b>		<b>15-16</b>
<b>Total Credits</b>		<b>47-48</b>