

The Computer Aided Drafting certificate prepares the students for advanced levels of computer aided design within industry, utilizing the latest hardware and software releases. The certificate may be completed within one year. This certificate prepares students to perform 2D and 3D design including customization and AutoLISP programming with their CAD system. Students may choose from an area of design concentration including architecture, mechanical design or interior design.

Required Courses	Credits	Pre or Co Reqs Rqd	Course Availability		
			Fall	Spr	Sum
<b>Required Courses</b>					
• AEC 110 - Architectural Design & Modeling* (4 Cr.)	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• AEC 116 - Building Materials* (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 101 - Computer Aided Drafting/2D I (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 102 - Computer Aided Drafting/2D II (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 201 - Computer Aided Drafting / Custom (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 202 - Computer Aided Drafting / 3D (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 224 - Revit Architecture (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 249 - AutoLISP Programming (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• CIS 118 - Intro to PC Applications (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• MAT 108 - Technical Mathematics* (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### Pre-Requisites, Co-Requisites, and Recommendations (grade C or better required)

Where requirements are listed as course categories (e.g. Electives, Arts/Humanities) rather than as specific courses, please note that depending upon course choice, pre-requisites may be required.

CAD 101 - Computer Aided Drafting/2D I (3 Cr.)

- Requirement: Students must have Windows File Management skills to create file folders, rename files, delete files, copy and move files

CAD 102 - Computer Aided Drafting/2D II (3 Cr.)

- Co-Requisite: CAD 101 - Computer Aided Drafting/2D I (3 Cr.)
- Requirement: Students must have Windows File Management skills to create file folders, rename files, delete files, copy and move files

CAD 201 - Computer Aided Drafting / Custom (3 Cr.)

- Pre-Requisite: CAD 102 - Computer Aided Drafting/2D II

CAD 202 - Computer Aided Drafting / 3D (3 Cr.)

- Pre-Requisite: CAD 102 - Computer Aided Drafting/2D II

CAD 249 - AutoLISP Programming (3 Cr.)

- Pre-Requisite: CAD 102 - Computer Aided Drafting/2D II

CIS 118 - Intro to PC Applications (3 Cr.)

- Requirement: Students must have Windows file management skills to create file folders, rename files, delete files, copy and move files

MAT 108 - Technical Mathematics\* (4 Cr.)

- Co-Requisite: MAT 091 - Applied Quantitative Lab
- Pre-Requisite: MAT 050 - Quantitative Literacy (4 Cr.) OR MAT 055 - Algebraic Literacy (4 Cr.) OR appropriate score

### Notes

- \*This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.
- All courses require student version software downloads (free) to a personal computer. Note: drafting software performs better on a Windows computer.
- Course availability is subject to change.
- Recommended courses may be listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) for additional elective recommendations.
- Refer to 21/22 catalog for specific requirements and important information about this certificate.

### Graduation Requirements

- To graduate, students must apply for graduation (form available at [www.arapahoe.edu/departments-and-programs/graduation](http://www.arapahoe.edu/departments-and-programs/graduation)) by the deadline and meet all degree requirements.

RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

Year 1: Fall	Credits	Course
	4	AEC 110 - Architectural Design & Modeling (4 Cr.)
	3	CAD 101 - Computer Aided Drafting/2D I (3 Cr.)
	3	CAD 102 - Computer Aided Drafting/2D II (3 Cr.)
	3	CAD 224 - Revit Architecture (3 Cr.)
	3	CIS 118 - Intro to PC Applications (3 Cr.)
Year 1: Spring	Credits	Course
	3	AEC 116 - Building Materials (3 Cr.)
	3	CAD 201 - Computer Aided Drafting / Custom (3 Cr.)
	3	CAD 202 - Computer Aided Drafting / 3D (3 Cr.)
	4	MAT 108 - Technical Mathematics (4 Cr.)
Year 2: Fall	Credits	Course
	3	CAD 249 - AutoLISP Programming (3 Cr.)

RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

Year 1: Fall	Credits	Course
	4	AEC 110 - Architectural Design & Modeling (4 Cr.)
	3	CIS 118 - Intro to PC Applications (3 Cr.)
Year 1: Spring	Credits	Course
	3	AEC 116 - Building Materials (3 Cr.)
	3	CAD 101 - Computer Aided Drafting/2D I (3 Cr.)
	3	CAD 102 - Computer Aided Drafting/2D II (3 Cr.)
Year 1: Summer	Credits	Course
	3	CAD 224 - Revit Architecture (3 Cr.)
	4	MAT 108 - Technical Mathematics (4 Cr.)
Year 2: Fall	Credits	Course
	3	CAD 201 - Computer Aided Drafting / Custom (3 Cr.)
	3	CAD 202 - Computer Aided Drafting / 3D (3 Cr.)
	3	CAD 249 - AutoLISP Programming (3 Cr.)