

Academic Plan Certificate

Computer Aided Drafting - Engineering Graphics Technology

31 Credits Catalog Year: 2020/2021

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.

		Pre or Co	Course Availability		
Required Courses	Credits	Reqs Rqd	Fall	Spr	Sum
Required Courses					
CAD 101 - Computer Aided Drafting/2D I	3	✓	✓	✓	✓
CAD 102 - Computer Aided Drafting/2D II	3	✓	✓	✓	✓
CAD 201 - Computer Aided Drafting / Custom	3	✓	✓	•	
CAD 202 - Computer Aided Drafting / 3D	3	✓	✓	•	
CAD 240 - Inventor OR CAD 255 - Solidworks	3		✓	•	
CAD 249 - AutoLISP Programming	3	✓	✓		
CIS 118 - Intro to PC Applications	3	✓	✓	•	✓
EGT 101 - Mechanical Design I	3	✓	✓	✓	
EGT 102 - Mechanical Design II	3	✓	✓	•	
MAT 108 - Technical Mathematics*	4		✓	•	✓





Computer Aided Drafting - Engineering Graphics Technology

31 Credits Catalog Year: 2020/2021

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

• 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

- Co-Requisite: CAD 101 Computer Aided Drafting/2D I OR CAD 105 AutoCAD for Interiors
- 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

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

CAD 202 - Computer Aided Drafting / 3D

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

CAD 249 - AutoLISP Programming

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

CIS 118 - Intro to PC Applications

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

EGT 101 - Mechanical Design I

CO-Requisite: CAD 101 - Computer Aided Drafting/2D I

EGT 102 - Mechanical Design II

- Pre-Requisite: CAD 102 Computer Aided Drafting/2D II
- Pre-Requisite: EGT 101 Mechanical Design I

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.
- 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 20/21 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) by the deadline and meet all degree requirements.



Academic Plan Certificate

Computer Aided Drafting - Engineering Graphics Technology

31 Credits Catalog Year: 2020/2021

RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

Year 1: Fall	Credits	Course
	3	CAD 101 - Computer Aided Drafting/2D I
	3	CAD 102 - Computer Aided Drafting/2D II
	3	CAD 240 - Inventor OR CAD 255 - Solidworks
	3	CIS 118 - Intro to PC Applications
	3	EGT 101 - Mechanical Design I
Year 1: Spring	Credits	Course
	3	CAD 201 - Computer Aided Drafting / Custom
	3	CAD 202 - Computer Aided Drafting / 3D
	3	EGT 102 - Mechanical Design II
	4	MAT 108 - Technical Mathematics
Year 2: Fall	Credits	Course
	3	CAD 249 - AutoLISP Programming





Computer Aided Drafting - Engineering Graphics Technology

31 Credits Catalog Year: 2020/2021

RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

Year 1: Fall	Credits	Course
	3	CAD 101 - Computer Aided Drafting/2D I
	3	CAD 102 - Computer Aided Drafting/2D II
	3	EGT 101 - Mechanical Design I
Year 1: Spring	Credits	Course
	3	CAD 240 - Inventor OR CAD 255 - Solidworks
	3	EGT 102 - Mechanical Design II
Year 1: Summer	Credits	Course
	3	CIS 118 - Intro to PC Applications
	4	MAT 108 - Technical Mathematics
Year 2: Fall	Credits	Course
	3	CAD 201 - Computer Aided Drafting / Custom
	3	CAD 202 - Computer Aided Drafting / 3D
	3	CAD 249 - AutoLISP Programming