

This program will provide the educational background and basic technical training necessary for the graduate to seek employment with one of the area manufacturing or engineering industries. Students will be prepared for a variety of mechanical drafting entry-level positions.

Required Courses	Credits	Pre or Co Reqs Rqd	Course Availability		
			Fall	Spr	Sum
General Education Courses					
• CAD 101 - Computer Aided Drafting/2D I	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CAD 102 - Computer Aided Drafting/2D II	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CAD 202 - Computer Aided Drafting / 3D	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• EGT 101 - Mechanical Design I	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• EGT 102 - Mechanical Design II	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• EGT 105 - Blueprint Reading	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• EGT 201 - Engineering Materials	3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• EGT 205 - Geometric Dimension & Tolerance	3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• MTE 120 - Manufacturing Processes	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restricted Elective					
• CAD 240 - Inventor OR CAD 255 - Solidworks	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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

- 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 202 - Computer Aided Drafting / 3D

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

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

- 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.

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	EGT 101 - Mechanical Design I
	3	EGT 105 - Blueprint Reading
	3	MTE 120 - Manufacturing Processes
Year 1: Spring	Credits	Course
	3	CAD 202 - Computer Aided Drafting / 3D
	3	CAD 240 - Inventor OR CAD 255 - Solidworks
	3	EGT 102 - Mechanical Design II
	3	EGT 201 - Engineering Materials
	3	EGT 205 - Geometric Dimension & Tolerance

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 202 - Computer Aided Drafting / 3D
	3	EGT 102 - Mechanical Design II
	3	EGT 105 - Blueprint Reading
Year 2: Fall	Credits	Course
	3	CAD 240 - Inventor OR CAD 255 - Solidworks
	3	MTE 120 - Manufacturing Processes
Year 2: Spring	Credits	Course
	3	EGT 201 - Engineering Materials
	3	EGT 205 - Geometric Dimension & Tolerance