

(DRAFT)Certificate: Computer Aided Drafting and Manufacturing 24-25



ABOUT THIS MAJOR

The certificate program includes coursework to help prepare students for CAD and CAM use in industry. Students who complete this program will have the necessary skill set to be employed by industry and in a variety of positions. Current engineers will find the program helpful for advanced skill building. Technicians will use this program to strengthen their skill set and technical communications skills. For more information, visit the [Career and Technical Education](#) division.

Residency: Minimum of 12 units completed at AVC with a minimum of 9 of those units completed from the certificate/major. (credit earned by examination will not be included in these 12 units) Title 5, Section 54000: <http://ccr.oal.ca.gov>.

TO EARN A Certificate A STUDENT MUST COMPLETE THE FOLLOWING:

- [1] Completion of Major & Program Electives Courses
- [2] Minimum grade point average of 2.0
- [3] A C or better in all courses required for the major

Certificate- Computer Aided Drafting and Manufacturing [Total Units 21]

Required Courses: Complete all of the following (21units)	
AM100 - Geometric Dimensioning and Tolerancing (GD&T)	3
AM105 - Introduction to 2D CAD	3
AM135A - 3D Solid Modeling I using CATIA/3DExperience	3
AM135B - 3D Solid Modeling I using Solidworks	3
AM235A - 3D Solid Modeling II using CATIA/3DExperience	3
AM235B - 3D Solid Modeling II using Solidworks	3
AM245 - Introduction to CAM II	3
AM145 - Introduction to CAM I	3

Certificate- Computer Aided Drafting in CATIA/3DExperience [Total Units 6]

Required Courses: Complete all of the following (21units)	
AM135A - 3D Solid Modeling I using CATIA/3DExperience	3
AM235A - 3D Solid Modeling II using CATIA/3DExperience	3

Certificate- Computer Aided Drafting in SolidWorks [Total Units 6]

Required Courses: Complete all of the following (6 units)	
AM135B - 3D Solid Modeling I using Solidworks	3
AM235B - 3D Solid Modeling II using Solidworks	3

RECOMMENDED PATHWAY Certificate- Computer Aided Manufacturing

The Recommended Plan of Study is determined by the discipline faculty.

- Take classes in **Summer** or **Interession** if needed to complete your degree in a timely manner
- **[#]** recommended courses may select other options.
- Fall/Spring: Max 19 units, 12-15 units Recommended.
- This is a certificate only program, currently no associated degree offered.

TERM 1	
Course	Units
AM100	3
AM105	3
Total Units	6

TERM 2	
Course	Units
AM135A	3
AM135B	3
Total Units	6

TERM 3	
Course	Units
AM235A	3
AM235B	3
Total Units	6

TERM 4	
Course	Units
AM245	3
AM145	3
Total Units	6

COUNSELING NOTE SECTION

Prerequisite: If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade to enroll in the next course. A satisfactory grade is a grade of "A," "B," "C" or "P". Students who enroll in classes for which they do not meet the prerequisites will be involuntarily dropped. Students will be notified of this involuntary drop. Title 5, Section 55200(d)

AVC 24-25 CATALOG: [ACADEMIC POLICIES](#)

INFORMATION and RESOURCES

Tutoring Assistance	Career Center	AVC Student Health Services
Transfer Center	Office of Students with Disabilities	Palmdale Center
Basic Needs	Financial Aid	Counseling Division