



ABOUT THIS MAJOR

The Associate in Sciences in Mechanical Engineering will provide students with a fundamental knowledge of Mechanical Engineering, to enhance their computational and problem solving skills, sharpen their critical thinking, and to ensure proper preparation for junior level Mechanical Engineering coursework at a university. Students completing this degree should realize that there are many sub disciplines in Mechanical Engineering and most require a similar core education, but not all. The requirements for an associate degree in Mechanical Engineering may be satisfied by completing the courses listed below in addition to the associate degree requirements. (See Graduation/Associate Degree Requirements.) For more information on Engineering, visit the [Mathematics, Sciences, and Engineering](#) division.

TO EARN A DEGREE A STUDENT MUST COMPLETE THE FOLLOWING:

- [1] Completion of a minimum of 60-semester units or 90 quarter units of degree applicable courses
- [2] A minimum of 18-semester units in a major
- [3] Completion of 21 units AVC General Education Requirements
- [4] Minimum overall grade point average of 2.0
- [5] A "C" or better in all courses required for the major

AS- Mechanical Engineering (ENRM)

[Total Units Required for the Certificate/Major: 44-45]

Required CHEM Courses, (total 5 units)	
CHEM110 OR CHEM 110H - General Chemistry/HONORS	5

Required CALC Courses, (a total of 5 units)	
MATH150 OR MATH 150H - Calculus & Analytic Geometry/ Honors	5
Prerequisite: Math 140 or Math 149 or placement by multiple measures.	

Required Courses, complete ALL 31 units from the following:	
ENGR125 - Programming and Problem-Solving in MATLAB	4
Prerequisite: Completion of MATH 150	
ENGR140 - Engineering 3D Graphics	3
Prerequisite: Completion of MATH 135 or higher or placement by multiple measure	
ENGR210 - Statics	4
Prerequisite: Completion of MATH 160 and PHYS 110.	
MATH160 - Calculus and Analytic Geometry	4
Prerequisite: Completion of MATH 150 or MATH 150H or placement by multiple measures	
MATH230 - Introduction to Ordinary Differential Equations	4
Prerequisite: Completion of MATH 160	
MATH250 - Calculus and Analytic Geometry	4
Prerequisite: Completion of MATH 160	
PHYS110 - General Physics	4
Prerequisite: Completion of or concurrent enrollment in MATH 150 or MATH 150H	
PHYS120 - General Physics	4
Prerequisite: PHYS 110. Completion of or concurrent enrollment in MATH 160.	

Core Program Electives, choose one (a total of 3-4 units)	
ENGR110 - Introduction to Engineering	3
ENGR130 - Materials Science	4
Prerequisite: Completion of CHEM 110 and PHYS 110	

RECOMMENDED PATHWAY

A.S. Mechanical Engineering

The Recommended Plan of Study is determined by the discipline faculty. Take classes in **Summer** or **Intersession** if needed to complete your degree in a timely manner!

Fall/Spring: Max 19 units | Summer: Max 9 units | Intersession: Max 6 units

SEMESTER 1	
Course	Units
CHEM 110 OR CHEM 110H (AVC GE AREA 5)	5
MATH 150 OR MATH 150H (AVC GE AREA 2)	5
ENGR 140	3
AVC GE AREA 6: ETHNIC STUDIES	3
Total Units	16

SEMESTER 2	
Course	Units
AVC GE AREA 1A: ENGLC1000	4
ENGR 125	4
MATH 140	4
PHYS 110	4
Total Units	16

SEMESTER 3	
Course	Units
MATH 230	4
PROGRAM ELECTIVE: ENGR 130 (rec.)	4
PHYS 120	4
AVC GE AREA 3: ARTS & HUMANTIES	3
Total Units	15

SEMESTER 4	
Course	Units
AVC GE AREA 4: SOCIAL & BEHAV. SCIENCE	3
ENGR 210	4
MATH 250	4
AVC GE AREA 1B: ORAL COMM & CRITICAL THINK.	3
Total Units	14
TOTAL UNITS	62

Counseling Notes

CHEM 110 : To succeed in CHEM 110, students are required to successfully complete CHEM 101 or one year of High School Chemistry. Algebra is used extensively to solve problems involving quantities. Prerequisite: Completion of Intermediate Algebra or higher or placement by multiple measures

HONORS COURSES: CHEM 110, MATH 150

Students may take either CHEM 110, MATH 150 or CHEM 110H, MATH 150H. Duplicate credit will not be awarded. This honors course is intended for students in the Honors Transfer Program. For more information about Honors Transfer Alliance Program visit: <https://www.avc.edu/academics/programs-and-pathways/honors>

2026-2027 AVC General Education Requirements

Advising Form Effective Fall 2026 - Summer 2027

GE AREA				COMPLETED	IN PROGRESS	NEED	The requirements for an AA or AS degree include the following: 1. A minimum of 60 semester units; with at least 12 semester units completed in residence at AVC for an AA/AS degree (credit earned by examination will not be included in these 12 units); maximum of 12 pass/no-pass credit units can be accepted towards an AA/AS degree. 2. Refer to each individual program for major requirements. All major courses as specified in the AVC catalog <u>must</u> be completed with a grade of "C" or better. 3. An overall grade point average (GPA) of 2.0 ("C" average) is required. Double counting: While a course may satisfy more than one general education requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a general education requirement and a major or area of emphasis requirement. Prerequisite: If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade in order 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. Complete at least 3 semester units from each of the following areas below: 1A, 1B, 2, 3, 4, 5, and 6. Completion of 1a requires a minimum a grade of "C" or "P". Minimum Total GE Units Required 21 semester units or 28-31.5 quarter units.
AREA 1: ENGLISH COMPOSITION, ORAL COMMUNICATION, AND CRITICAL THINKING							
2 courses required, one from Area A and one from Area B, 6 semester or 8 quarter units							
1A					Group A: English Composition: ENGL C1000, ENGL C1000H		
1B					Group B: Oral Communication and Critical Thinking: COMM C1000, C1000H; ENGL C1001, C1001H, C1002, C1002H; PHIL 201		
AREA 2: Mathematical Concepts and Quantitative Reasoning							
1 course, 3 semester or 4 quarter units							
2					MATH 103, 110, 116, 124, 128, 140, 148, 149, 150, 150H, 160, 220, 230, 250; STAT C1000, C1000H		
AREA 3: ARTS AND HUMANITIES							
1 courses, 3 semester units or 4 quarter units							
3					ART 100, 103, 104, 106, 113, 132, 135, 137, 140, 145, 163, 170, 213; ARTH C1100, C1100H, C1200, C1200H; CHIN 101, 102, 201, 202; DFST 101, 102, 201, 202; COMM 112, 114, 217, 219; DA 101, 113; ENGL 114, 221, 222, 225, 227, 230, 231, 235, 242, 253, 253H, 256, 257, 259, 265, 279, C1002, C1002H; FREN 101, 102, 201, 202, 203; FTV 101, 107, 108, 201, 203, 251, 261; GER 101, 102, 201, 202; HIST 104, 105, 110, 110H, 111, 111H, 113, 115, 119, C1001, C1001H, C1002, C1002H; LATN 101, 102, 201; MUS 101, 101H, 105, 106, 110, 111, 120, 151; MUSC 102, 103, 107, 108, 109; PHIL 105, 105H, 106, 108, 109, 230, 240; NF 150; PHOT 107; PHTC 101, 150, 201; SPAN 101, 102, 110SS, 201, 202, 203, 210SS, 220SS; THA 101, 101H, 102, 103, 104, 106, 110, 111, 130, 225, 239, 239H, 240		
AREA 4: SOCIAL AND BEHAVIORAL SCIENCE							
1 course, 3 semester units or 4 quarter units							
4					AJ 206; ANTH 102, 103, 110, 112, 112H, 140; BUS 212; CFE 102, 103; DFST 105, 106, 110; ECON 100, 110, C2001, C2001H, C2002, C2002H; GEOG 105, 106, 110; HIST 104, 105, 110, 110H, 111, 111H, 113, 114, 116, 118, 119, C1001, C1001H, C1002, C1002H; POLS 103, 200, 201, 202, 203, C1000, C1000H; PSY 200, 201, 212, 230, 232, 233, 234, 235, 236; PSYC C1000, C1000H; SOC 105, 110, 111, 112, 115, 116, 120, 200; SOCI C1000, C1000H		
AREA 5: NATURAL SCIENCES							
1 course, 3 semester units or 4 quarter units							
5					ANTH 101, 101H; ASTR C1001, C1001H; BIOL 100, C1001#, 102, 103, 104, 104H, 110, 120, 201, 202, 204, 205; CHEM 101, 102, 110, 120, 210, 220; ELTE 101; ERSC 101; GEOG 101, 102; GEOL 101, 101H, 102; PHYS 101, 102, 110, 120, 211; PSCI 101 # Students must register separately for the required lab component of BIOL 101L		
AREA 6: ETHNIC STUDIES							
1 course, 3 semester units or 4 quarter units							
6					ETHN 101, 102, 110, 111, 112, 113, 114; ENGL 257 or ETHN 257EN		



26-27 A.S. Mechanical Engineering (ENRM)

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)

Application for Graduation:

Antelope Valley College awards degrees three times annually following the Fall, Spring, and summer semesters. Students must apply for graduation to earn their degree or certificate. **Applications are due by September 6 for spring/summer graduates and by February 14 for fall graduates.**

AVC 26-27 CATALOG: [ACADEMIC POLICIES](#)

INFORMATION and RESOURCES

[Tutoring Assistance](#)
[Transfer Center](#)
[Basic Needs](#)

[Career Center](#)
[Office of Students with Disabilities](#)
[Financial Aid](#)

[AVC Student Health Services](#)
[Palmdale Center](#)
[Counseling Division](#)