



# Certificate/AS-Automotive Technology (Driveability, Emissions Electrical) 19-20

## Recommended Program Sequence

All courses with a + sign indicate a pre-requisite or co-requisite

Term 1 (Semester: Maximum 19 units, 15 units recommended)		Units	Term 5 (Semester: Maximum 19 units, 15 units recommended)		Units
Daytime:	AUTO 150, Auto. Electrical	10	Daytime:	AUTO 278, Program Elective <i>only offered in the evening</i>	4
Nighttime:	AUTO 151, Chassis & Body Elec. Sys.	4	Nighttime:	Auto 153, Starting & Charging Systems	2
Nighttime:	AUTO 176, Carburetor Fuel Sys.	2	Nighttime:	Auto 177, Electronic Fuel Injection	4
General Education Area E (Additional Breadth)		3	General Education Area B (Social Science)		3
General Education Area D1 (English 101)		3	General Elective		3
Nighttime:	General Elective	3	Daytime/Nighttime: General Elective		4/3
** These courses intended for night students			Day/Night Total		14/15
Day/Night Total		16/15			
Term 2: (Interession(6/3)-Summer (9/6) Max./Recommended units)			Term 6: (Interession(6/3)-Summer (9/6) Max./Recommended units)		
Term 3 (Semester: Maximum 19 units, 15 units recommended)		Units	Term 7 (Semester: Maximum 19 units, 15 units recommended)		Units
Daytime:	AUTO 175, Fuel Emissions Systems & Ca. Clean Air Car Crs.	10	Daytime:	AUTO 277, Program Elective <i>only offered in the evening</i>	4
Nighttime:	AUTO 152, Ignitions Systems	2	Day or Nighttime:	AUTO 276**, California Clean Air Course	8
General Education Area D2 (Communication & Critical Thinking)		3	Nighttime:	Program Elective (If needed) or General Elective	3
General Education Area C (Humanities)		3	General Education Area F (Diversity Studies)		3
Nighttime:	General Elective	7	General Education Area A (Science)		3
Order for classes and time to complete may vary for night students			Day/Night Total		17/18
Day/Night Total		16/15			
Term 4: (Interession(6/3)-Summer (9/6) Max./Recommended units)			<b>Graduate</b>		

Take Summer or Interession classes if needed to complete the program in a timely manner.

The state requires all students to have a Comprehensive Educational Plan. Make a counseling appointment as soon as enrollment is established on any term. Come by the Counseling Center or call.

Driveability, Emissions & Electrical: Certificate/Major Required		<i>other requirements for Engine &amp; Drive Trains degree</i>	
AUTO 150, Automotive Electrical Systems <i>or</i> AUTO 151**, Automotive Chassis & Body Electrical Systems <i>and</i> AUTO 152**, Automotive Ignition Systems <i>and</i> AUTO 153, Automotive Starting & Charging Systems	8-10	General Education	21-27
AUTO 175, Automotive Fuel, Emissions Systems & California Clean Air Car Course <i>or</i> AUTO 276**, Calif. Clean Air Course <i>and</i> AUTO 176**Automotive Carburetor Fuel Systems <i>and</i> AUTO 177**, Electrical Fuel Injections	10-14	Proficiency (See Proficiency Requirements)	*
Program Electives	2-8	Electives	2-8
<b>Program Electives Courses: Complete 3 to 8 units</b>		<b>Minimum Units Required for AS Degree 60</b>	
AUTO 277, Electrical Engine Controls-General Motors Systems	4	AS General Education: At least 3 units from each of the following areas below: A, B, C, D1, D2, E, and F. Minimum Total GE Units Required 21	
AUTO 278, Electrical Engine Controls-Ford/Chrysler Systems	4	<b>Area A Natural Sciences: (min. 3 units)</b>	
WELD 101, Welding Fundamentals (Not offered)	2	ANTH 101, 101L	
<b>Units Required for the Certificate/Major: 26</b>		ASTR 101+, 101L+	
<i>other requirements for degree</i>		BIOL 100, 101+, 101L+, 102, 103, 104, 110+, 120+, 201+, 202+, 204+, 205+	
General Education	21-27	CHEM 101+, 102+, 110+	
Proficiency (See Proficiency Requirements)	*	ELTE 101	
Electives	2-8	ERSC 101+	
<b>Minimum Units Required for AS Degree 60</b>		GEOG 101+, 101L+, 102, 102L+	
ASE CERTIFICATION: AVC is not a testing site. Suggested courses for the *Automotive Service Excellence General Auto Mechanic Certification (ASE) test:		GEO 101+, 101L+, 102+, 102L+	
AUTO 110, Automotive (Fall only)	10	PHYS 101, 102+, 110+, 120+, 211+	
AUTO 125, Automotive Chassis (Spring only)	10	PSCI 101	
AUTO 128, Auto. Power Trains (Fall only)	4	<b>Area B Social &amp; Behavioral Sciences: (min. 3 units)</b>	
AUTO 150, Auto. Electrical Systems (Fall only)	10	AJ 201, 204, 206	
AUTO 152, Auto. Ignition Systems (Spring only)	2	ANTH 102, 103, 112, 140	
AUTO 175, Auto. Fuel, Emission Systems, and California Clean Air Car Course (Spring only)	10	BUS 101	
AUTO 231, Automatic Transmissions (Spring only)	2	CFE 102	
AUTO 232, Automatic Transmissions (Fall only)	2	COMM 217+	
<b>Units Required for the Certificate: 10</b>		DFST 105	
* Two years experience as a mechanic are required for the ASE certificate. A two-year full-time college program will suffice for one year of experience.		ECON 100, 101+, 102+, 110	
		GEOG 105, 106, 110	
		HIST 101, 102, 104, 105, 107, 108, 110, 111, 113, 114, 116, 118, 119	
		POL 101, 103, 200, 201+, 202+, 203+	
		PSY 101, 201+, 212+, 230+, 232, 233+, 234+, 235+, 236+	
		SOC 101, 105, 110, 111, 112, 115, 116, 120	
		<b>Area C Humanities: (min. 3 units)</b>	
		ART 100, 101, 102, 103, 104, 106, 110, 113, 120, 132, 135, 136+, 137+, 140, 145, 150, 163+, 170+, 210+, 213+	
		CHIN 101, 102+, 201+, 202+	
		COMM 103, 112, 114, 214+	
		DA 101	
		DFST 101, 102+, 105, 106, 201+, 202+	

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ENGL 102, 111+, 112+, 221+, 222+, 225+, 227+, 230+, 231+, 235+, 242+, 253+, 256+, 257+, 259+, 265+, 279+  
 FREN 101, 102+, 201+, 202+, 203+  
 FTV 101, 103, 107, 108, 201, 203, 241, 251, 261  
 GER 101, 102+, 201+, 202+  
 HIST 115  
 ID 150, 201  
 LATN 101, 102+, 201+  
 MUS 101, 105, 111, 131, 132+, 151+, 153+, 185+, 231+, 232+, 251A+, 251B+, 253A+, 253B+  
 MUSC 102, 103, 107, 108  
 PHIL 105, 106, 108, 109  
 PHOT 107  
 PHTC 101, 150+, 201+  
 SPAN 101, 110SS, 102+, 201+, 202+, 210SS+, 220SS+  
 THA 101, 102, 103, 110, 115A, 115B+, 116A+, 116B+, 117A+, 117B+, 118A+, 118B+, 121A, 121B, 130, 133, 225+, 239

### Area D Language & Rationality: (min. 3 units from (1) and 3 units from

1. *Academic Composition:* Courses fulfilling the written composition requirement shall be designed to include both expository and argumentative writing.

ENGL 101+

2. *Communication and Analytical Thinking*

BUS 113+

CA 103

CIS 101, 111, 141, 157, 161

COMM 101, 103, 107, 109, 112, 114, 115, 217+, 219+

ENGL 102+, 103+

GEOG 201, 205

MATH 102+, 110+, 115+, 116+, 120+, 124+, 128+, 135+, 140+, 148+

150+, 160+, 220+, 230+, 250+

PHIL 101, 106, 110, 201+

### Area E - Additional Breadth: (min. 3 units)

From areas A\*\*, B\*\*, C\*\*, D2\*\*, or

MUSC 108

CFE 102

HE 101, 120, 201

NF 100, 102, 103, 110, 150

COMM 103, 107, 219+

ID 100, 120

PSY 212

DFST 105

KINT 100

SOC 111, 116

HD 100, 101, 102, 103, 105

LIB 107, 110

Any DA activity course(s) from DA102-205, except DA 107A-C, 108, 109, and 111.

Any Kinesiology Fitness (KINF) activity course, Intercollegiate Athletics (IATH) activity course, or up to 4 units for military experience.

**\*\* Courses must be taken from a discipline not previously selected.**

### Area F Diversity Studies: (min. 3 units)

ANTH 102, 112

FTV 201, 203

BUS 212

HE 201+

CFE 116+

HIST 110, 111, 113

COMM 114, 217+, 219+

MUSC 107, 108

DFST 105, 106

POLS 202+

ECON 110

SOC 105, 110, 116

ENGL 250+, 253+, 256+, 257+, 259+

THA 239

**Grade Point Average Requirement:** An overall grade point average of 2.0 ("C" average) is required.

### Proficiency Requirements:

Proficiency requirements exist for the areas of Reading, Writing and Math. Students must demonstrate competency in each of these areas in order to be eligible for the associate degree.

A. **READING:** Complete ENGL 101 with a "C" or better or completion of READ 099 with a minimum grade of "P" (Pass), or completion of an Associate Degree or higher from a regionally accredited institution of higher education.

B. **WRITING:** Completion of ENGL 101 with a minimum grade of "C." NOTE: ENGL 101 may be taken with the Pass/No Pass option; however, students are cautioned that other colleges and universities may not accept ENGL 101 courses taken on a Pass/No Pass basis, especially for satisfaction of general education and major requirements. Students planning to transfer should check college catalogs for applicable policies.

C. **MATHEMATICS:** Completion of MATH 102 or higher or CIS 121 with a satisfactory grade or placement by AVC assessment into a math course higher than MATH 102.

**\*Fulfilling proficiencies** will not require any extra units if the competencies are demonstrated by including the required courses in the general education, or major requirements, or by satisfying the reading proficiency through AVC's policy.

**Electives:** The remaining number of units (up to a minimum of 60) are considered electives.

Any course that has already been counted toward (1) the general education requirements, or (2) the major, cannot be used as an elective. Any course with a designation of "AVC" at the end of a course description can be used as an elective.

**Double Counting:** While a course might 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.

**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>

**Requirements for Two or More Associate Degrees:** To be eligible for multiple associate degrees, a student must have completed all of the graduation requirements for each degree.

**Transfer:** Students planning to continue studies at a four-year college or university after AVC should visit the Transfer Resource Center or the Counseling Center and consult with a counselor as soon as possible to develop a plan of studies. Additional preparation for the major information on official transfer articulation agreements from AVC to many CSU/UC campuses can be found at the following Web site: [www.assist.org](http://www.assist.org)

The "Catalog Rights Policy" sets forth the criteria used for determining the degree requirements under which students may graduate. Please refer to the AVC Catalog for a detailed description or consult with a counselor.

**Advisory:** A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

**Prerequisite:** A condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. Prerequisites are enforced and a student will be blocked from enrolling or involuntarily dropped after enrolling if the student does not meet the stated prerequisite. A student must complete a course prerequisite with a satisfactory grade of A, B, C or P (pass).

**Corequisite:** A condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course. Corequisites are enforced and a student will be blocked from enrolling if the student does not meet the stated corequisite.