

A.S./Certificate: Electrical Technology 24-25



ABOUT THIS MAJOR

This program will help students gain the skills and knowledge necessary to install, maintain and troubleshoot a variety of electrical systems. These include residential wiring, commercial/industrial wiring and cabling, National Electric Code, troubleshooting and maintenance, motor controls and programmable logic control. The program gives students theory and “hands-on” practical experience related to all aspects of this occupation.

Successful students will gain experience in basic electricity, proper use of tools and test equipment, residential and commercial installations, the National Electric Code and electrical maintenance and repair. For more information, visit the [Career and Technical Education](#) division.

TO EARN A DEGREE A STUDENT MUST COMPLETE THE FOLLOWING:

- [1] Completion of 60-semester units
- [2] Completion of General Education Requirements
- [3] Minimum grade point average of 2.0
- [4] A C or better in all courses required for the major

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 Certificate only:** only the major & program electives courses are required and a must earn a minimum grade point average of 2.0

AS- Electrical Technology [Total Units 34]

Required Courses (34 units)	
ELEC110 - Fundamentals of Electricity	4
ELEC115 - Electrical Codes and Ordinances	4
ELEC120 - Residential Wiring	4
ELEC130 - Alternating Current Theory	3
ELEC140 - Comm & Indust Wiring & Cabling	4
ELEC150 - Electrical Maintenance	4
ELEC160 - Fundamentals of Motor Control	4
ELEC220 - Advanced Motor Control-PLC	4
ELEC250 - Electricians Journeyman Review	3

RECOMMENDED PATHWAY AS Electrical Technology

The Recommended Plan of Study is determined by the discipline faculty. All **Program Electives** for the Major and **General Education** Courses, Areas A-F, are recommended only. Except for ENGL 101, you can make other selections for this area if you choose (See back page for options).

- [*] = Courses will fulfill the completion requirements for Major & Gen Ed I
- [#] recommended courses may select other options.
- Electives are courses that count toward your credits for graduation, but not specific to degree of study
- Take classes in Summer or Intersession if needed to complete your degree in a timely manner!
- Fall/Spring: Max 19 units, 12-15 units Recommended.

TERM 1	
Course	Units
ELEC 110	4
ELEC 115	4
ELEC 120	4
AVC Gen-Ed- AREA D1: ENGL 101	3
Total Units	16

TERM 2	
Course	Units
ELEC 130	3
ELEC 140	4
ELEC 160	4
AVC Gen Ed- AREA A	3
Total Units	14

TERM 3	
Course	Units
ELEC 150	4
AVC Gen Ed- AREA B	3
AVC Gen Ed- AREA D2: #MATH 103	4
AVC Gen Ed- AREA E	3
Elective	1
Total Units	15

TERM 4	
Course	Units
ELEC 220	4
ELEC 250	3
AVC Gen Ed- AREA C	3
AVC Gen Ed-Area F	3
Elective	3
Total Units	16

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

2024-2025 AVC General Education Requirements

Advising Form Effective Fall 2024 - Summer 2025

GE AREA	COMPLETED	IN PROGRESS	NEED
			<p>The requirements for an AA or AS degree include the following:</p> <ol style="list-style-type: none"> 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. Refer to each individual program for major requirements. All major courses as specified in the AVC catalog must be completed with a grade of "C" or better. An overall grade point average (GPA) of 2.0 ("C" average) is required. <p>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.</p> <p>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. <i>Title 5, Section 55200(d)</i></p> <p>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 Legend: () = Newly Approved, Effective Fall 2024</p>
AREA A: NATURAL SCIENCES-Select at least 3 units			
A			<p>ANTH 101,(101H); ASTR 101,(101H); BIOL 100, 101*#, 101L*#, 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 *#BIOL 101 & 101L must be taken concurrently</p>
AREA B: SOCIAL & BEHAVIORAL SCIENCES-Select at least 3 units			
B			<p>AJ 201, 204, 206; ANTH 102, 103, 110, 112,(112H), 140; BUS 101, 212; CFE 102, 103; COMM 217; DFST 105, 106, 110; ECON 100, 101,(101H), 102,(102H), 110; GEOG 105, 106, 110; HIST 101, 102, 104, 105, 107,(107H), 108, (108H),110, (110H), 111,(111H), 113, 114, 116, 118, 119; POLS 101, (101H),103, 200, 201, 202, 203; PSY 101,(101H) 200, 201, 212, 230, 232, 233, 234, 235, 236; SOC 101,(101H), 105, 110, 111, 112, 115, 116, 120, 200</p>
AREA C: HUMANITIES-Select at least 3 units			
C			<p>ART 100, 101,(101H),102, 103, 104, 106, 110, 113, 120, 132, 135, 136, 137, 140, 145, 150, 163, 170, 210, 213; CHIN 101, 102, 201, 202; COMM 112, 114, 214, 217, 219; DA 101; DFST 101, 102, 105, 106, 201, 202; ENGL 102, 111, 112, 221, 222, 225, 227, 230, 231, 235, 242, 253,(253H), 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 101, 102, 104, 105, 107,(107H), 108,(108H), 110,(110H), 111,(111H), 113, 115, 118, 119; LATN 101, 102, 201; MUS 101,(101H), 105,(106),(110), 111, 121, 131, 132, 151, 153, 185, 231, 232, 251A, 251B, 253A, 253B; MUSC 102, 103, 107,108, 109,(109); NF 150; PHIL 105,(105H), 106, 108, 109 (130), (140); PHOT 107; PHTC 101, 150, 201; SPAN 101, 110SS, 102, 201, 202, 210SS, 220SS; THA 101,(101H), 102, 103, 110, 115A, 115B, 116A, 116B, 117A, 117B, 118A, 118B, 121A, 121B, 130, 133, 225, 239, (239H)</p>
AREA D: LANGUAGE AND RATIONALITY Select 3 units from (1) and 3 units from (2). <u>Grade of "C" or better required in Area D1</u>			
D1			<p>D1 Academic Composition: ENGL 101, (101H)</p>
D2			<p>D2 Communication and Analytical Thinking: BUS 113; CA 103; CS 120, 121, 122, 123; COMM 101,(101H), 107, 109, 112, 114, 115, 201, 217, 219; ENGL 102,(102H), 103,(103H); GEOG 201, 205;MATH, 110, 115,(115H), 116, 120, 124, 128, 135, 140, 148, 150,(150H), 160, 220, 230, 250; PHIL 101, 106, 110, 201,(210)</p>
AREA E: ADDITIONAL BREADTH Select 3 units from Areas A, B, C, D2, or E *Courses must be taken from a discipline not previously selected			
E			<p>DA 111; HD 100, 101, 102, 103, 105; HE 101, 120, 201; KINT 100; LIB 107, 110; NF 100, 102, 103, 110 Any DA activity course(s) from DA 102-205, <u>except</u> 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</p>
AREA F: DIVERSITY STUDIES-Select 3 units			
F			<p>ANTH 102, 112,(112H); BUS 212; CFE 116; COMM 114, 217, 219; DFST 105, 106 ; ECON 110 ; ENGL 250, 253,(253H), 256, 257, 259; ETHN (110),(111), (112),(113), 257EN;FTV 201, 203; HE 201; HIST 110, (110H),111, (111H), 113 ; MUSC 107, 108; POLS 202; SOC 105, 110, 116; THA 239, (239H)</p>