

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

The Associate of Applied Science Degree in Electronics Engineering Technology prepares students to assist in providing support for engineering functions or to function as an Electronics Technician. Instruction includes analog and digital circuit design, implementation and testing, fabrication techniques, telecommunications, microprocessor programming and interface. Specialize Concentration instruction includes topics critical to the concentration, such as in-depth analysis of analog and digital circuits, electrical and power supply troubleshooting, systems such as radar and microwaves, computer and network fundamentals, medical terminology, healthcare organizational dynamics, and fluid dynamics.

This two-year program provides students with the methods and procedures used in engineering organizations and by electronics technicians in a bench repair, defense contractor, and biomedical equipment repair functions. Instruction takes place in a hands-on, state-of-the-art environment.

STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Demonstrate a working knowledge of safety procedures, common hand tools, and proper electronics fabrication techniques.
- Identify active and passive components, design, construct, and test various DC and AC circuits to include low-pass, band-pass, and high-pass filters using operational amplifiers as well as constructing a Bode Plot of an amplifier's frequency and phase response.
- For the Bench and Defense Contractor concentrations, demonstrate a working knowledge of microcomputers and microprocessors to include writing program to control other devices and demonstrate working knowledge of common modulation and transmission methods to include such as AM, FM and Delta modulation. The Bench concentration will also focus upon more advanced analog and digital circuits. The Defense Contractor concentration will focus upon electrical and power supply troubleshooting and repair along with systems such as radar and microwaves.
- For the Biomedical Equipment concentration a demonstrated understanding of computers, computer networks and fluid dynamics along with an understanding of medical terminology, healthcare dynamics, and the fundamentals of the functional characteristics of the human body.

GENERAL EDUCATION REQUIREMENTS (27 Credits):

	CR	SEMESTER
COMMUNICATIONS: ENG 107	3	_____
ENGLISH: ENG 100, 101, 113	3-5	_____
HUMAN RELATIONS: ALS 101, ANTH 101, 112, 201, 205 HIST 105, 106, 150, 151, 210, 247, 260 HMS 130, 135, 265, MGT 100B, 283, PHIL 135, PSC 201, PSY 101, 102, 207, 208, 261, SOC	3	_____
MATHEMATICS: MATH 111B or MATH 127 or higher	3	_____
SCIENCE: EGG 131, 132	8	_____
FINE ARTS/HUMANITIES/ SOCIAL SCIENCES: AM, ANTH, ART, COM, ECON, ENG 223 or above, GEOG 106 or above, HIST, International Languages, Music, PHIL, PSC, PSY, SOC, THTR, WMST 113	3	_____
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4-6	_____

SPECIAL PROGRAM REQUIREMENTS (40 Credits):

	CR	SEMESTER
ET 104B Fabrication and Soldering Techniques	2	_____
ET 131B DC for Electronics	4	_____

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	CR	SEMESTER
ET 132B AC for Electronics	4	_____
ET 212B Digital Logic I	4	_____
ET 220B Solid State Devices and Circuits I	4	_____
ET 228B Data Acquisition	4	_____

FOR BENCH TECHNICIAN:

ET 106B Test Equipment Operation	3	_____
ET 213B Digital Logic II	4	_____
ET 222B Solid State Devices and Circuits II	4	_____
ET 282B Microprocessors I	4	_____
ET 293B Telecommunication Transmission Methods	4	_____

FOR DEFENSE CONTRACTOR TECHNICIANS:

ET 205B Power Supply Theory and Repair	3	_____
ET 282B Microprocessors I	4	_____
ET 289B Electronic Troubleshooting	4	_____
ET 293B Telecommunication Transmission Methods	4	_____

Plus 3 credits from the following:

ET 106B Test Equipment Operation	3	_____
ET 113B Introduction to Radar	3	_____
ET 125B RF and Microwave Devices	3	_____
ET 200 or higher		_____

FOR BIOMEDICAL EQUIPMENT TECHNICIANS:

CSCO 109B PC Troubleshooting and Repair	3	_____
CSCO 120B Cisco Networking Academies I	4	_____
HHP 123B Introduction to the Human Body	4	_____
HIT 105B Healthcare Delivery Systems	2	_____
HIT 118B Language of Medicine	3	_____
MT 108B Fluid Power	4	_____

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Total Credits

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.