

**DEGREE MAP**

The following sequence is an example of how this degree can be completed in two years. This sequence is based on satisfaction of all Basic Skills requirements and prerequisites, and presumes a fall start date. An individual's program may vary depending on transfer institution, career objectives, or individual needs. See your counselor for other options and to monitor your progress.

**Program Name:** Electronics Technology-Associate of Applied Science Degree

**Location(s) Offered:**

Sierra Vista Campus (CIS 129 is only offered through the Virtual Campus.)

**Learning Outcomes:** *Students who successfully complete this program will be able to do the following:*

1. Analyze voltage, current, power, resistance, impedance, reactance, and time constants for alternating current and direct current resistive circuits.
2. Identify device types, determine expected voltages, and troubleshoot and isolate faults in analog power supply components and semiconductor devices.
3. Perform numbering system conversions and calculations, and compare the operation of logic gates, flip-flops, registers, counters, and advanced digital circuits.
4. Identify and measure various modulated signals, and interpret the signal characteristics using a spectrum analyzer and oscilloscope.
5. Calculate amplifier gain, cable loss, and band pass measurements on radio frequency devices.
6. Demonstrate an understanding of the importance and operation of microprocessors and microcomputers in communication systems.
7. Create solutions to typical information systems problems; and demonstrate an understanding of basic information systems functions.
8. Utilize database applications to support decision making and to facilitate effective problem solving.

**Course or program prerequisite(s) not included in the degree:**

ENG 101 Composition requires appropriate English placement score (or see advisor).  
This program requires RDG 122 Reading Critically or exemption.

**Program Reviewed:** Feb 22, 2016

**Key:**

*IW=Intensive Writing*  
*F2F=Face-to-Face Instruction*  
*ITV=Instructional Television*  
*VC=Virtual Campus/Online*

<i>Requirements</i>	<i>Course(s) Recommended</i>	<i>Delivery Method</i>	<i>Credits</i>
<b><i>First Semester (Fall):</i></b>			
Core Curriculum	ELT 105 Introduction to DC Circuits	F2F	3
Core Curriculum	ELT 106 Introduction to AC Circuits	F2F	4
General Education-Composition	ENG 101 Composition	F2F,VC	3
General Education-Math Substitute	PSY 101 Introduction to Psychology	F2F,VC	3
General Education-Technology Literacy	CIS 116 Computer Essentials or CIS 120 Intro to Info Systems	F2F,VC	3
<b><i>Second Semester (Spring):</i></b>			
Core Curriculum	CIS 150 Essentials of Networking	F2F, VC	3
Core Curriculum	CIS 181 Computer Applications	F2F,VC	3
Core Curriculum	ELT 125 Electronic Circuits and Systems	F2F	4
Core Curriculum	ELT 222 Semiconductors and Transistors	F2F	4
General Education-Composition	ENG 102 English Composition	F2F,VC	3
<b><i>Third Semester (Fall):</i></b>			
Core Curriculum	CIS 160 Introduction to Information Security	F2F, VC	4
Core Curriculum	ELT 245 Communication Electronics I	F2F	4
Core Curriculum	ELT 247 Communication Electronics II	F2F	4
General Education-Liberal Arts	SOC 101 Introduction to Sociology	F2F,VC	3
<b><i>Fourth Semester (Spring):</i></b>			
Core Curriculum	CIS 129 Introduction to Programming Logic	VC	1
Core Curriculum	CIS 179 Applied Technical Writing	F2F,VC	3
Core Curriculum	ELT 131 FCC Regulations	F2F	2
Core Curriculum	ELT 135 Digital and Microprocessor Fundamentals	F2F	4
Core Curriculum	ELT 227 Autonomous Systems and Control Stations	F2F	3
General Education-Liberal Arts	COM 102 Essentials of Communication	F2F	3

**Total credits required:**

64

**Notes:**