

## Electrical & Instrumentation Technology – AAS Concentration: Mining

Total Credits: 69-71

**Progression Plan** 

Fall Term 1 17-19 credit hours	Hours	Notes
ELT 183 Digital Circuits	3	
MAT 100 Technical Mathematics     Recommended Mathematics	3	<b>Prerequisite:</b> MAT 082 or a satisfactory score on the mathematics skills assessment.
ELT 295 Apprenticeship: Electrical Instrumentation	3	
MET 150 Surface Mine Safety Training	1	
1 <sup>st</sup> 8 weeks		
ELT 111 DC Electrical Systems	3	
<ul> <li>STU 100 Computer Literacy <u>OR</u> AGS 101 Microcomputers in Agriculture <u>OR</u> CSA 126 Microsoft Office for Windows</li> </ul>	1-3	<i>Note:</i> It is recommended that students take STU 100 to fulfill this requirement.
2 <sup>nd</sup> 8 weeks		
ELT 112 AC Electrical Systems	3	Prerequisite: ELT 111 (may be taken concurrently)
Term hours subtotal:	17-19	_

Spring Term 1 17 credit hours	Hours	Notes
ELT 126 Solid State Devices	3	Prerequisites: ELT 111 and ELT 112
AIT 115 Hydraulic Systems	3	
AIT 120 Pnuematic Systems	3	
ELT 295 Apprenticeship: Electrical Instrumentation	3	
MET 116 Rigging	1	
1 <sup>st</sup> 8 weeks		
ELT 162 Microprocessors & Microcontrollers	2	Prerequisites: ELT 183
2 <sup>nd</sup> 8 weeks		
ELT 165 Programmable Logic Controllers	2	Prerequisite: ELT 101 or ELT 111
Term hours subtotal:	17	

Summer Term 1 5-6 credit hours	Hours	Notes
General Education Requirement	3-4	
Physical and Biological Science or Social and Behavioral Sciences or Arts and Humanities or College Composition or Applied Communication		
<ul> <li>WLD 113 SMAW/GMAW Welding for Non-Welding</li> </ul>	2	
Majors		
Recommended Program Elective		
Term hours subtotal:	5-6	

Fall Term 2 15-17 credit hours	Hours	Notes
<ul> <li>ELT 221 Communication Systems and Circuits</li> </ul>	3	Prerequisites: ELT 126 and ELT 162
ELT 271 Process Control Instrumentation	3	Prerequisite: ELT 126
<ul> <li>General Education Requirement         Physical and Biological Science or Social and Behavioral Sciences or Arts and         Humanities or College Composition or Applied Communication     </li> </ul>	3-4	
<ul> <li>General Education Requirement         Physical and Biological Science or Social and Behavioral Sciences or Arts and         Humanities or College Composition or Applied Communication     </li> </ul>	3-4	
<ul> <li>ELT 295 Apprenticeship: Electrical Instrumentation</li> </ul>	3	
Term hours subtotal:	15-17	_

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Spring Term 2 14-16 credit hours	Hours	Notes
ELT 258 Electronic Troubleshooting	2	Prerequisites: ELT 126 and ELT 162
ELT 272 Motors and Motor Control	3	Prerequisite: ELT 126
General Education Course     Physical and Biological Science or Social and Behavioral Sciences or Arts and     Humanities or College Composition or Applied Communication	3-4	
General Education Course     Physical and Biological Science or Social and Behavioral Sciences or Arts and     Humanities or College Composition or Applied Communication	3-4	
ELT 295 Apprenticeship: Electrical Instrumentation	3	
Term hours subtotal:	14-16	_

This recommended sequence is not a binding agreement of any kind between Yavapai College and the student, but merely represents a potential curriculum that may be altered as appropriate to meet the student's academic objectives. Course availability is subject to change and all courses are not available every semester. Students should inquire each semester with their Advisor before registering to determine current requirements and possible changes to the suggested curriculum.