

# Electrical Technology - Specialization in Mechatronics

## Associate of Applied Science Degree

### Program Coordinator:

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**Program Purpose:** This program is designed to prepare students for employment upon graduation as electrical technicians with emphasis on installation, power distribution, controls, programmable controls, mechanical systems and the maintenance of industrial machinery.

First Semester (Fall)		
ENG 111 or ENG 115	College Composition I or Technical Writing	3
DRF 161	Blueprint Reading	2
MEC 140	Introduction to Mechatronics	3
ELE 133	Practical Electricity I	3
ITE 100	Introduction to Information Systems <sup>1</sup>	3
SAF 130	Industrial Safety-OSHA 10	1
SDV 101	Orientation to College Success	1
<b>Total Credits</b>		<b>16</b>
Second Semester (Spring)		
ELE 134	Practical Electricity II	3
MTH 111	Basic Technical Mathematics	3
ELE 141	DC & AC Machines	4
ELE 175	Industrial Solid State Devices and Circuits	3
IND 243	Principles and Applications of Mechatronics	3
<b>Total Credits</b>		<b>16</b>
Third Semester (Fall)		
BUS 100	Introduction to Business <sup>2</sup>	3
ELE 233	Programmable Logic Controllers I	3
MUS 121 or REL 230	Music Appreciation I or Religions of the World <sup>3</sup>	3
MEC 161	Hydraulics & Pneumatics	3
PSY 120	Principles of Macroeconomics or Human Relations <sup>4</sup>	3
ELE 245	Industrial Wiring	3
<b>Total Credits</b>		<b>18</b>
Fourth Semester (Spring)		
ELE 234	Programmable Logic Controllers II	3
ELE 225	Electrical Control Systems	4
ELE 132	National Electrical Code II	3
WEL 110	Welding Processes	3
PED	Physical Education	1
INS 232	Systems Troubleshooting	3
<b>Total Credits</b>		<b>17</b>

**Total minimum credits for AAS Degree**

**67**

<sup>1</sup> ITE 115 or ITE 119 are acceptable substitutes

<sup>2</sup> Recommended General Education Elective

<sup>3</sup> Recommended Humanities Elective

<sup>4</sup> Recommended Social Science Elective



Graduates are eligible to test for Siemens Level 1 Mechatronics Certification.

- Students completing SAF 130 are eligible to take the OSHA-10 exam.