Primary Path: 28-30 credit hours

ELW 111	Introduction to Electrical Line Worker	3
ELW 112	Introduction to Electricity	3
ELW 114	Overhead Line Construction I	3
ELW 211	Underground Line Construction I	3
ELW 231	Electrical Power Systems	3
ELW 115	Overhead Line Construction II	3
ELW 116	Overhead Line Construction III	3
ELW 117	Overhead Line Construction IV	3
ELW 212	Underground Line Construction II	3
ELW 221	Advanced Line Construction	3

Secondary Path: 12 credit hours

*CWE	Cooperative Work Experience	4
AHS 106	Cardiopulmonary Resuscitation	1
AHS 114	Basic First Aid	1
EEM 165	Residential/Commercial Wiring	4
IMT 102	Industrial Safety	2

Additional Requirements: five credit hours

ELW 110	Electrical Computations	2
ELW 113	National Electrical Safety Code	3

**Students may substitute four credit hours from the EEM course listings for CWE. Any CWE must be performed in conjunction with the ELW program to count toward program graduation requirements.*

Electrician: Automation and Industrial Course Display

Credit Requirements: 67 Semester Credit Hours

Graduates of this program are employed as automated controls technicians, electrical and instrumentation technicians, or robotics and automation technicians at manufacturing plants, chemical plants, food and beverage plants, water systems, and energy generation facilities. Job duties include installing, maintaining and repairing various types of electro-mechanical automation equipment.

Core Curriculum Requirements (15 credit hours)

REQ COM	Select one course from Communication listing on page B-3	3
REQ HUM	Select one course from Humanities listing on page B-3	3
REQ MAT	Select one math course from Mathematics/Natural Sciences listing on page B-4	3
REQ OTH	Select one course from other courses listed on pages B-3 and B-4	3
REQ SSC	Select one course from Behavioral/ Social Sciences listing on page B-3	3

Primary Path Requirements (31 credit hours)

EEM 113	DC Circuits I	2
EEM 114	DC Circuits II	2
EEM 119	AC Circuits I	2
EEM 120	AC Circuits II	2
EEM 129	Solid State Devices I	2
EEM 130	Solid State Devices II	2
EEM 218	AC/DC Machines with Electrical Codes I	2
EEM 219	AC/DC Machines with Electrical Codes II	2
EEM 221	DC/AC Drives	3
EEM 251	Programmable Controllers	3
EEM 252	Programmable Controllers Applications	3
EIT 110	Principles of Instrumentation	3
EIT 244	Computers and PLCs in Instrumentation	3

Secondary Path Requirements (15 credit hours)

EEM 167	Commercial/Industrial Wiring I	2
EEM 168	Commercial/Industrial Wiring II	2
EEM 151	Motor Controls I	4
IMT 132	Hydraulics	2
IMT 133	Pneumatics	2
IMT 163	Problem Solving for Mechanical Applications	3

Additional Requirements (6 credit hours)

EEM 107	Industrial Computer Techniques	2
EEM 108	Basic Industrial Skills I	2
EEM 110	Basic Industrial Skills II	2

Electrician: Automation and Industrial Career Path

Credit Requirements: 67 Semester Credit Hours
Day

Recommended Sequence of Courses
First Semester – Fall

EEM 107	Industrial Computer Techniques	2
EEM 113	DC Circuits I	2
EEM 114	DC Circuits II	2
EEM 167	Commercial/Industrial Wiring I	2
EEM 168	Commercial/Industrial Wiring II	2
REQ MAT	Select one math course from Mathematics/Natural Sciences listing on page B-4	3
	Total 13	

Second Semester – Spring

EEM 119	AC Circuits I	2
EEM 120	AC Circuits II	2
EEM 129	Solid State Devices I	2
EEM 130	Solid State Devices II	2
REQ COM	Select one course from Communication listing on page B-3	3
REQ OTH	Select one course from other courses listed on pages B-3 and B-4	3
	Total 14	

Third Semester – Summer

EEM 108	Basic Industrial Skills I	2
EEM 110	Basic Industrial Skills II	2
EEM 218	AC/DC Machines with Electrical Codes I	2
EEM 219	AC/DC Machines with Electrical Codes II	2
EEM 221	DC/AC Drives	3
EEM 251	Programmable Controllers	3
	Total 14	

Fourth Semester – Fall

EEM 151	Motor Controls I	4
EEM 252	Programmable Controllers Applications	3
EIT 110	Principles of Instrumentation	3
IMT 132	Hydraulics	2
IMT 133	Pneumatics	2
	Total 14	

Fifth Semester – Spring

EIT 244	Computers and PLCs in Instrumentation	3
IMT 163	Problem Solving for Mechanical Applications	3
REQ HUM	Select one course from Humanities listing on page B-3	3
REQ SSC	Select one course from Behavioral/ Social Sciences listing on page B-3	3
	Total 12	

Electrician: Automation and Industrial Career Path

Credit Requirements: 67 Semester Credit Hours
Evening

Recommended Sequence of Courses
First Semester – Fall

EEM 167	Commercial/Industrial Wiring I	2
EEM 168	Commercial/Industrial Wiring II	2
REQ MAT	Select one math course from Mathematics/Natural Sciences listing on page B-4	3
	Total 7	

Second Semester - Spring

EEM 113	DC Circuits I	2
EEM 114	DC Circuits II	2
REQ COM	Select one course from Communication listing on page B-3	3
	Total 7	

Third Semester – Summer

EEM 107	Industrial Computer Techniques	2
EEM 119	AC Circuits I	2
EEM 120	AC Circuits II	2
	Total 6	

Fourth Semester – Fall

EEM 218	AC/DC Machines with Electrical Codes I	2
EEM 219	AC/DC Machines with Electrical Codes II	2
EEM 129	Solid State Devices I	2
EEM 130	Solid State Devices II	2
	Total 8	

Fifth Semester – Spring

EEM 151	Motor Controls I	4
EEM 251	Programmable Controllers	3
	Total 7	

Sixth Semester – Summer

EEM 221	DC/AC Drives	3
EEM 252	Programmable Controllers Applications	3
	Total 6	

Seventh Semester – Fall

IMT 132	Hydraulics	2
IMT 133	Pneumatics	2
REQ OTH	Select one course from other courses listed on pages B-3 and B-4	3
	Total 7	