CONSTRUCTION TECHNOLOGY - ELECTRICAL, ASSOCIATE IN APPLIED SCIENCE DEGREE

NMC Code 653

The AAS in Electrical provides in-depth training and knowledge to those students who seek to have a well-balanced foundation of not only technical skills, but soft skills as well. Students completing this degree will find a wide range and availability of job opportunities. Electrical technicians have been in demand for installations, maintenance, repair, and support for industries ranging from private home owners to hospitals, manufacturers, and breweries. Technical training includes electrical theory, National Electrical Code, motors, generators, lighting, and control systems for residential through commercial/industrial applications. The curriculum is designed by the industry and aligned with State of Michigan electrical apprenticeship requirements. Information: (231) 995-2803.

Within this degree students will have the opportunity to earn the following: Electrical Journeyman's License.

Requirements

Major Requirements

Course	Title	Credits
General Education Requirements		
ENG 111	English Composition	4
Select one of the following:		3-4
BUS 231	Professional Communications	
ENG 112	English Composition	
ENG 220	Technical Writing	
Any Group 1 Humanities course		3
Math Competency [1]		3-4
Select one of the following:		4
ENV 103	Earth Science	
ENV 117	Meteorology & Climatology	
PHY 121	General Physics I	
Any Group 1 Social Sciences course		3
Occupational Specialty Requirements		
CMT 100	Introductory Craft Skills	2
ELE 101	Introduction to Electrical I	3
ELE 107	Introduction to Electrical II	3
ELE 122	Begin Electrical Studies I	3
ELE 126	Begin Electrical Studies II	3
ELE 132	Intermed Electrical Studies I	3
ELE 136	Intermed Electrical Studies II	3
ELE 144	Advanced Electrical Studies I	3
ELE 147	Advan Electrical Studies II	3
ELE 210	Electrical Code Studies I	3
ELE 220	Electrical Code Studies II	3
EGY 115	Residential Energy Efficiency	3
Approved Construction Technology Electives		6
Total Credits		**61-63**

[1] Placement into MTH 122 Trigonometry ***or*** higher, ***or*** completion of MTH 121 College Algebra

Approved Electives

Course	Title	Credits
CAR 101	Introduction to Carpentry	3
CAR 102	Intro to Woodworking	3
CAR 105	Foundations and Framing	3
CAR 121	Exterior Construction	3
CAR 125	Interior Construction [1]	3
CMT 102	Construction Blueprint Reading	3
CMT 107	Construction Supervision	4
CMT 207	Construction Cost Estimating [1]	3
EET 103	Electrical Studies I [1]	3
EET 204	Electrical Studies II [1]	3
EET 221	Industrial Controls [1]	3
EET 232	Programmable Logic Controllers [1]	3
EET 233	PLC Applications I [1]	3
EET 234	PLC Applications II [1]	3
EGY 105	Sustainable Building Design	3
EGY 145	Geothermal Technology [1]	3
HVA 101	Introduction to HVAC/R I	3
HVA 104	Introduction to HVAC/R II	3
HVA 120	Intermediate HVAC/R I	3
HVA 124	Intermediate HVAC/R II	3
HVA 130	Advanced HVAC/R I	3
HVA 136	Advanced HVAC/R II - EPA Cert [1]	3
PLU 101	Introduction to Plumbing	3
PLU 105	Plumbing Components [1]	3
PLU 121	Commercial Plumbing [1]	3

PLU 125	Plumbing Installation [1]	3
SVR 111	Intro to Field Surveying	2
SVR 112	Intro to Surveying Data Use	3
UAS 141	Remote Pilot Flight	3
UAS 211	Commercial Drone Operations [1]	3
UAS 241	Advanced Drone Operations [1]	3

[1] Denotes courses with required prerequisites.

Course Sequence Guide

Course	Title	Credits
Year 1		
Fall		
CMT 100	Introductory Craft Skills	2
ENG 111	English Composition	4
Social Sciences: Any Group 1 course		3
ELE 101	Introduction to Electrical I	3
ELE 107	Introduction to Electrical II	3
MTH 121 or MTH 122	College Algebra or Trigonometry	3-4
	Credits	**18-19**
Spring		
Select one of the following:		3-4
ENG 112	English Composition	
ENG 220	Technical Writing	
BUS 231	Professional Communications	
EGY 115	Residential Energy Efficiency	3
ELE 122	Beginning Electrical Studies I	3
ELE 126	Beginning Electrical Studies II	3
Approved Construction Technology Elective		3
	Credits	**15-16**
Year 2		
Fall		
Select one of the following:		4
ENV 103	Earth Science	
ENV 117	Meteorology & Climatology	
PHY 121	General Physics I	
ELE 132	Intermediate Electrical Studies I	3
ELE 144	Advanced Electrical Studies I	3
ELE 210	Electrical Code Studies I	3
	Credits	**13**
Spring		
ELE 136	Intermediate Electrical Studies II	3
ELE 147	Advanced Electrical Studies II	3
ELE 220	Electrical Code Studies II	3
Humanities: Any Group 1 course		3
Approved Construction Technology Elective		3
	Credits	**15**
	Total Credits	**61-63**

The responsibility for determining the transferability of this degree and courses to another institution is the sole responsibility of the student.