

# CONSTRUCTION TECHNOLOGY - RENEWABLE ENERGY TECHNOLOGY - ELECTRICAL, CERTIFICATE OF ACHIEVEMENT (LEVEL II)

NMC Code 065

This certificate is designed for someone with introductory interest or for someone who is currently working in the electrical field and wants to enhance their job prospects. With a very narrow focus on the fundamentals of renewable energy, the specific applications as related to producing electricity, and a few electrical courses, the individual who completes this certificate will greatly enhance their job market skills. Information: (231) 995-2803.

## Requirements Certificate Requirements

Course	Title	Credits
CMT 100	Introductory Craft Skills	2
EGY 105	Sustainable Building Design	3
EGY 115	Residential Energy Efficiency	3
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
Approved Construction Technology Elective		6
MTH 111	Intermediate Algebra	3-4
or MTH 120	Mathematical Explorations	
<b>Total Credits</b>		<b>29-30</b>

**Note:** ELE 210 Electrical Code Studies I and ELE 220 Electrical Code Studies II are additional courses offered for those seeking National Electrical Code references to daily work or those who would like structured study preparation for the Journeymen or Master Electrician License Exam.

## 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 <sup>1</sup>	3
CMT 107	Construction Supervision	4
CMT 207	Construction Cost Estimating <sup>1</sup>	3
EET 103	Electrical Studies I <sup>1</sup>	3
EET 204	Electrical Studies II <sup>1</sup>	3
EET 221	Industrial Controls <sup>1</sup>	3
EET 232	Programmable Logic Controllers <sup>1</sup>	3
EET 233	PLC Applications I <sup>1</sup>	3
EET 234	PLC Applications II <sup>1</sup>	3

EGY 145	Geothermal Technology <sup>1</sup>	3
ELE 126	Begin Electrical Studies II	3
ELE 132	Intermed Electrical Studies I	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
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 <sup>1</sup>	3
PLU 101	Introduction to Plumbing	3
PLU 105	Plumbing Components <sup>1</sup>	3
PLU 121	Commercial Plumbing <sup>1</sup>	3
PLU 125	Plumbing Installation <sup>1</sup>	3
UAS 141	Remote Pilot Flight	3
SVR 111	Intro to Field Surveying	2
SVR 112	Intro to Surveying Data Use	3
UAS 211	Commercial Drone Operations <sup>1</sup>	3
UAS 241	Advanced Drone Operations <sup>1</sup>	3

<sup>1</sup> Denotes courses with required prerequisites.

## Course Sequence Guide

Course	Title	Credits
<b>Year 1</b>		
<b>Fall</b>		
MTH 111	Intermediate Algebra	3-4
or MTH 120	or Mathematical Explorations	
CMT 100	Introductory Craft Skills	2
ELE 101	Introduction to Electrical I	3
ELE 107	Introduction to Electrical II	3
<b>Credits</b>		<b>11-12</b>
<b>Spring</b>		
ELE 122	Beginning Electrical Studies I	3
ELE 126	Beginning Electrical Studies II	3
Approved Construction Technology Elective		6
<b>Credits</b>		<b>12</b>
<b>Year 2</b>		
<b>Fall</b>		
EGY 105	Sustainable Building Design (Fall only)	3
EGY 115	Residential Energy Efficiency	3
<b>Credits</b>		<b>6</b>
<b>Total Credits</b>		<b>29-30</b>

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