## CONSTRUCTION TECHNOLOGY - FACILITIES MAINTENANCE, CERTIFICATE OF ACHIEVEMENT (LEVEL II)

NMC Code 063

Performing facilities maintenance requires knowledge in several areas. This level II certificate covers reading blueprints, general carpentry, tools of the trade, electrical wiring and schematics, and thermodynamics of refrigeration. Also required will be 14 technical elective credits that can range from drafting to alternative energy integration into a facility. The curriculum is designed by the industry and aligned with national competency standards. Students receive hands-on training in our state-of-the-art facilities. Information: (231) 995-2803.

## Requirements Certificate Requirements

Course	Title	Credits
CAR 101	Introduction to Carpentry	3
CAR 105	Foundations and Framing	3
CMT 100	Introductory Craft Skills	2
ELE 101	Introduction to Electrical I	3
ELE 107	Introduction to Electrical II	3
HVA 101	Introduction to HVAC/R I	3
HVA 104	Introduction to HVAC/R II	3
MTH 111	Intermediate Algebra	3-4
or MTH 120	Mathematical Explorations	
PLU 101	Introduction to Plumbing	3
PLU 105	Plumbing Components	3
Approved Construction Technology Electives		6
Total Credits		35-36

## **Approved Electives**

Course	Title	Credits
CAR 102	Intro to Woodworking	3
CAR 121	Exterior Construction	3
CAR 125	Interior Construction <sup>1</sup>	3
CMT 107	Construction Supervision	4
CMT 102	Construction Blueprint Reading	2
CMT 207	Construction Cost Estimating <sup>1</sup>	3
EET 103	Electrical Studies I 1	3
EET 204	Electrical Studies II 1	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 105	Sustainable Building Design	3
EGY 115	Residential Energy Efficiency	3
EGY 145	Geothermal Technology <sup>1</sup>	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
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	3
PLU 121	Commercial Plumbing <sup>1</sup>	3
PLU 125	Plumbing Installation <sup>1</sup>	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 <sup>1</sup>	3
UAS 241	Advanced Drone Operations <sup>1</sup>	3

<sup>&</sup>lt;sup>1</sup> Denotes courses with required prerequisites.

## **Course Sequence Guide**

Course Year 1	Title	Credits
Fall		
CAR 101	Introduction to Carpentry (Fall only)	3
CAR 105	Foundations and Framing (Fall only)	3
CMT 100	Introductory Craft Skills	2
ELE 101	Introduction to Electrical I	3
PLU 101	Introduction to Plumbing (Fall only)	3
	Credits	14
Spring		
MTH 111	Intermediate Algebra	3-4
or MTH 120	or Mathematical Explorations	
HVA 101	Introduction to HVAC/R I	3
ELE 107	Introduction to Electrical II	3
PLU 105	Plumbing Components (Spring only)	3
	Credits	12-13
Year 2		
Fall		
HVA 104	Introduction to HVAC/R II	3
Approved Construction Technology Electives		6
	Credits	9
	Total Credits	35-36

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