

APPLIED ENGINEERING & TECHNOLOGIES

FACILITY MAINTENANCE TECHNOLOGY

Facility Maintenance Technology Degree – A50190

The Facility Maintenance Technology curriculum prepares individuals to repair and maintain electrical and mechanical systems and physical structures of commercial and industrial institutions. Emphasis is on multi-disciplined systems maintenance, troubleshooting, and problem resolution.

Course work includes plumbing, electrical, air conditioning, heating, blueprint reading, building codes, and OSHA regulations, as well as computer applications.

Graduates should qualify for positions as general building mechanics or maintenance technician.

Program Sequence

First Semester

AHR 110	Introduction to Refrigeration	5
AHR 112	Heating Technology	4
BPR 130	Print Reading-Construction	3
ELC 118	National Electrical Code	2
ELC 131*	Circuit Analysis I	4

Second Semester

AHR 120	HVACR Maintenance	2
ELC 114	Commercial Wiring	4
ENG 110	Freshman Composition	3
MNT 110	Intro to Maintenance Procedures	2

Third Semester

BAT 111	Building Automation Systems	2
ELC 127	Software for Technicians	2
ELN 231	Industrial Controls	3
	Major Elective	2

Fourth Semester

AHR 215	Commercial HVAC Controls	2
BAT 221	BAS Networking	3
BAT 251	Building Automation Controls	3
COM 120	Intro to Interpersonal Communication	3
ELN 235	Data Communication Systems	4

Fifth Semester

HUM 110	Technology and Society	3
ISC 121	Environmental Health & Safety	3
MAT 110	Math Measurement & Literacy	3
PSY 118	Interpersonal Psychology	3
	Major Elective	3

Major Electives

(Select 5 hours from the following courses):

AHR 113	Comfort Cooling	4
BAT 212	BAT Logic and Programming	3
ELC 113	Residential Wiring	4
WBL 111	Work-Based Learning I	1
WBL 112	Work-Based Learning I	2

*ELC 112 is an allowable substitution for ELC 131.

Graduation Requirements 68 Credit Hours

Facility Maintenance Technology Diploma – D50190

The Facility Maintenance Technology Diploma prepares individuals to repair and maintain electrical and mechanical systems in commercial and industrial institutions. Emphasis is placed on multi-disciplined systems maintenance, troubleshooting, and problem resolution. Included in the program are courses in air conditioning, heating, refrigeration, electrical, building automation and print reading. Graduates should qualify for entry-level positions related to facility operation.

Program Sequence

First Semester

AHR 110	Introduction to Refrigeration	5
AHR 112	Heating Technology	4
ELC 118	National Electrical Code	2
ELC 131*	Circuit Analysis I	4

Second Semester

AHR 120	HVACR Maintenance	2
BAT 111	Building Automation Systems	2
ELC 114	Commercial Wiring	4
ENG 110	Freshman Composition	3
MNT 110	Intro to Maintenance Procedures	2

Third Semester

BPR 130	Print Reading-Construction	3
ELC 127	Software for Technicians	2
ELN 231	Industrial Controls	3
PSY 118	Interpersonal Psychology	3

*ELC 112 is an allowable substitution for ELC 131.

Graduation Requirements 39 Credit Hours

Facility Maintenance Technology: Electrical Systems Certificate – C50190A

The Electrical Systems Certificate is designed for individuals wishing to advance their knowledge of electrical wiring. Coursework includes residential wiring, commercial wiring, and national electric code. Graduates should qualify for entry-level positions in residential or light commercial facility maintenance.

Program Sequence

First Semester

ELC 113	Residential Wiring	4
ELC 118	National Electrical Code	2

Second Semester

ELC 112*	DC/AC Electricity	4
ELC 114	Commercial Wiring	4

Third Semester

ELC 127	Software for Technicians	2
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*ELC 131 is an allowable substitution for ELC 112.

Graduation Requirements 17 Credit Hours

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ISC 121 Environmental Health & Safety.....3

Graduation Requirements 14 Credit Hours

Facility Maintenance Technology: HVACR Certificate – C50190B

The HVACR Certificate is designed for individuals wishing to advance their knowledge of air conditioning, refrigeration, heating operation, and maintenance. Coursework includes electricity, heating and cooling technology, maintenance, and print reading. Graduates should qualify for entry-level positions in residential or light commercial facility maintenance.

Program Sequence

First Semester

AHR 111 HVACR Electricity 3
 AHR 112 Heating Technology 4

Second Semester

AHR 113 Comfort Cooling 4
 AHR 120 HVACR Maintenance 2
 BPR 130 Print Reading-Construction 3

Graduation Requirements 16 Credit Hours

Basic Facilities Technology I Certificate – C50190D

The Basic Facilities Technology I Certificate is designed for individuals wishing to learn about air conditioning, heating, and electrical wiring. Graduates should qualify for entry-level positions in residential facility maintenance.

Program Sequence

First Semester

AHR 112 Heating Technology 4
 ELC 113 Residential Wiring 4

Second Semester

AHR 111 HVACR Electricity 3
 AHR 113 Comfort Cooling 4

Graduation Requirements 15 Credit Hours

Basic Facilities Technology II Certificate – C50190E

The Basic Facilities Technology II Certificate is designed for individuals wishing to advance their knowledge of electrical wiring, print reading, and workplace safety. Graduates should qualify for entry level positions in residential or light commercial facility maintenance.

Program Sequence

First Semester

BPR 130 Print Reading-Construction 3
 ELC 114 Commercial Wiring 4

Second Semester

ELC 118 National Electrical Code 2
 ELC 127 Software for Technicians 2