For entry into the program, you must be at least 18 years old and obtain the Certificate in Applied Science, Electrician: Automated Controls or seek departmental approval for prerequisite waiver.

**Recommended Sequence of Courses**  
**First Semester – Summer**  
- EEM 108 Basic Industrial Skills I  
- IMT 160 Preventive Maintenance  
  **Total 5**

**Second Semester – Fall**  
- AMT 209 Automation Networks – Ethernet  
- IMT 161 Mechanical Power Applications  
  **Total 7**

**Third Semester – Spring**  
- AMT 105 Robotics and Automated Controls I  
- AMT 205 Robotics and Automated Controls II  
  **Total 6**

### Air Conditioning/Refrigeration Mechanics

**Certificate in Applied Science**  
**Credit Requirements: 24 Semester Credit Hours**

The Air Conditioning and Refrigeration Mechanics program prepares students for an entry-level position in the residential and light commercial heating and air conditioning field. Admission into this program requires qualifying scores on SAT, ACT or TTC’s placement test. High school graduation is not required if you are at least 18 years old.

**Recommended Sequence of Courses**

**First Semester – Fall/Spring**  
- ACR 106 Basic Electricity for HVAC/R  
- ACR 108 Refrigeration Fundamentals  
- ACR 109 Tools and Service Techniques II  
  **Total 9**

**Second Semester – Spring**  
- ACR 111 Gas Heating Principles  
- ACR 120 Basic Air Conditioning  
  **Total 7**

**Third Semester – Summer**  
- ACR 150 Basic Sheet Metal  
- ACR 210 Heat Pumps  
- ACR 224 Codes and Ordinances  
  **Total 8**

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found in section D.

### Arboriculture Management

**Certificate in Applied Science**  
**Credit Requirements: 25 Semester Credit Hours**

This certificate introduces and develops skills in current arboriculture practices. Students will be trained to select, establish and maintain trees.
Admission into this program requires proof of high school graduation or GED and qualifying scores on SAT, ACT or the TTC placement test.

### Recommended Sequence of Courses

#### First Semester – Fall
- HRT 125 Soils 4
- HRT 144 Plant Pests 3
- HRT 106 Ornamentals 2

**Total 9**

#### Second Semester – Spring
- HRT 240 Pesticides 4
- HRT 107 Woody Ornamentals 3

**Total 7**

#### Third Semester – Summer
- HRT 150 Arboriculture I 3
- HRT 121 Commercial Irrigation 3
- CWE 113 Cooperative Work Experience 3

**Total 9**

### Athletic Field Maintenance

#### Certificate in Applied Science

#### Credit Requirements: 20 Semester Credit Hours

This certificate addresses current needs for the maintenance of athletic fields, including football, baseball and soccer. Students would be trained to maintain turf in addition to the specialty skills required of athletic fields.

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.

### Recommended Sequence of Courses

#### First Semester – Fall
- HRT 125 Soils 4
- HRT 144 Plant Pests 3
- HRT 241 Turf Management 3

**Total 10**

#### Second Semester – Spring
- HRT 240 Pesticides 4

**Total 4**

#### Third Semester – Summer
- HRT 121 Commercial Irrigation 3
- CWE 113 Cooperative Work Experience 3

**Total 6**

### Automotive Servicing

#### Certificate in Applied Science

#### Credit Requirements: 39 Semester Credit Hours

The Automotive Servicing program prepares students for employment in the automotive servicing industry. This program teaches the basic skills required for the diagnosis, maintenance and repair of passenger cars and light trucks through theory and shop instruction.

Admission into this program requires a valid driver’s license and qualifying scores on SAT, ACT or TTC’s placement test. High school graduation is not required if you are at least 18 years old.

### Recommended Sequence of Courses

#### First Semester – Fall
- AUT 101 Engine Fundamentals 3
- AUT 111 Brakes 3
- AUT 131 Electrical Systems 3
- AUT 133 Electrical Fundamentals 3

**Total 12**

#### Second Semester – Spring
- AUT 103 Engine Reconditioning 4
- AUT 145 Engine Performance 3
- AUT 149 Ignition and Fuel Systems 4
- AUT 241 Automotive Air Conditioning 4

**Total 15**

#### Third Semester – Summer
- AUT 116 Manual Transmission and Axle 4
- AUT 122 Suspension and Alignment 4
- AUT 152 Automatic Transmission 4

**Total 12**

Important information about the educational debt, earnings, and completion rates of students who attended this program can be found in section D.