

HVAC/R Technician (Technical Diploma)

The HVAC/R Technician Technical Diploma is designed to provide specialized classroom instruction and practical shop experience that prepare students for employment in a variety of jobs in the field of heating, ventilation, air conditioning, and refrigeration. The curriculum includes training in the installation, diagnosis, repair, and maintenance of the operation conditions of residential and commercial heating, air conditioning, and refrigeration systems. A career and technical certificate (CTC) may be earned in the first semester and a certificate of technical studies (CTS) may be earned in the second semester; a technical diploma may be earned upon completion of all technical courses. Students also have the option to complete the Technical Studies Associate of Applied Science with a concentration in Air Conditioning and Refrigeration.

To receive any credential in this program, the student must:

- Complete the coursework listed below.
- Earn a “C” or better in all courses that are to be used toward the credential.

Program Outcomes. Upon successful completion of the program, the graduate will be able to:

1. Demonstrate the skills needed for entry and advanced levels of employment in an air conditioning and refrigeration career.
2. Demonstrate the installation, diagnosis, repair, and maintenance of residential heating, air conditioning, and refrigeration systems.
3. Demonstrate safe and efficient work practices, basic occupational skills, employability skills, and strong work ethics.

Program of Study

First Semester		Credit Hours
HACR 1113	Electrical Fundamentals	3
HACR 1123	Electrical Components	3
HACR 1133	Electrical Motors	3
HACR 1143	Applied Electricity	3
HACR 1213	Introduction to HVAC	3
Semester Total:		15
Second Semester		Credit Hours
HACR 1229	Principles of Refrigeration	9
HACR 1234	Commercial Air Conditioning	4
HACR 1245	Commercial Refrigeration Systems	5
Semester Total:		18
Third Semester		Credit Hours
HACR 2118	Heating Systems	8
HACR 2124	Residential Heat Pumps	4
Semester Total:		12
Total Program Credit Hours:		45

Air Conditioning and Refrigeration Credentials Available:

		Credit Hours
HACR 1113	Electrical Fundamentals	3
HACR 1123	Electrical Components	3
HACR 1133	Electrical Motors	3
HACR 1143	Applied Electricity	3
CTC: HVAC and Refrigeration Helper I		12

		Credit Hours
HACR 1113	Electrical Fundamentals	3
HACR 1123	Electrical Components	3
HACR 1133	Electrical Motors	3
HACR 1143	Applied Electricity	3
HACR 1213	Introduction to HVAC	3
HACR 1229	Principles of Refrigeration	9
CTS: HVAC and Refrigeration Helper II (all courses required for HVAC and Refrigeration Helper I plus HACR 1213 and HACR 1229)		24

Students interested in pursuing the Technical Studies Associate of Applied Science with a concentration in Air Conditioning and Refrigeration should contact the Division of Technical Education at 225-216-8367 for more information.