

AIR CONDITIONING AND REFRIGERATION TECHNICIAN, TECHNICAL DIPLOMA (TD)

Location: Reserve

The Air Conditioning and Refrigeration Technician TD is designed to prepare students for employment in a variety of jobs in the field of air conditioning and refrigeration by teaching students how to install, diagnose, repair, and maintain the operating condition of domestic, residential, and commercial heating, air conditioning, and refrigeration systems. Certificates and opportunities to earn industry-based certifications (IBCs) are available with progression through the program.

Specialized Accreditation

We are proud to share that our program has achieved HVAC Excellence Programmatic Accreditation from the HVAC Excellence Accreditation Review Board. This prestigious recognition validates the quality of our curriculum, instructional resources, and commitment to excellence in preparing students for success in the HVAC industry. When you enroll in our HVAC program, you can be confident you're receiving training that meets rigorous industry standards and positions you for success in this growing field.

Curriculum

Course	Title	Hours
First Semester		
CORE 1003	Core Industry Safety	3
HACR 1113	Electrical Fundamentals	3
HACR 1213	Electrical Components	3
HACR 1313	Electric Motors	3
Hours		12
Second Semester		
HACR 1003	HVAC Introduction	3
HACR 1123	Principles of Refrigeration I	3
HACR 1223	Principles of Refrigeration II	3
HACR 1323	Principles of Refrigeration III	3
Hours		12
Third Semester		
HACR 2422	Refrigeration	2
HACR 2032	Ductless Technology	2
HACR 2143	Air Conditioning I	3
HACR 2243	Air Conditioning II	3
HACR 2072	System Design	2
Hours		12
Fourth Semester		
HACR 2153	Heating I	3
HACR 2253	Heating II	3
HACR 2063	Heat Pumps	3
HACR 2413	Applied Electricity and Troubl	3
Hours		12
Total Hours		48

Additional Academic Awards

HVAC Electrical Apprentice Career and Technical Certificate (CTC)

Code	Title	Hours
CORE 1003	Core Industry Safety	3
HACR 1113	Electrical Fundamentals	3
HACR 1213	Electrical Components	3
HACR 1313	Electric Motors	3
Total Hours		12

A/C and Refrigeration Helper Certificate of Technical Studies (CTS)

Code	Title	Hours
CORE 1003	Core Industry Safety	3
HACR 1003	HVAC Introduction	3
HACR 1113	Electrical Fundamentals	3
HACR 1213	Electrical Components	3
HACR 1313	Electric Motors	3
HACR 1123	Principles of Refrigeration I	3
HACR 1223	Principles of Refrigeration II	3
HACR 1323	Principles of Refrigeration III	3
Total Hours		24

Industry-based Certifications

First Semester

- NCCER Core
- HVAC Excellence Electrical Employment Ready

Second Semester

- EPA 608 Certification

Third Semester

- HVAC Excellence Air Conditioning Employment Ready

Fourth Semester

- HVAC Excellence Gas Heat Employment Ready and Electric Heat Employment Ready
- HVAC Excellence Heat Pump Employment Ready

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

1. Perform tasks safely and in accordance with all applicable acts, regulations, legislation, and codes to ensure personal and public safety.
2. Demonstrate safe selection, use, storage, and inventory procedures for tools, devices, and equipment.
3. Demonstrate the communication, analytical, problem-solving, teamwork, and organizational skills and work habits needed for entry levels of employment in an air conditioning and refrigeration career.
4. Demonstrate the installation, servicing, diagnosis, troubleshooting, and maintenance of heating, refrigeration, air conditioning systems, and associated components.

For additional career-related information and resources, visit the RPCC Career Success webpage (<https://www.rpcc.edu/workforce-training/career-success-center/career-success-center/>).