

HVAC, COMMERCIAL AIR CONDITIONING TECHNOLOGY, LEVEL 2 CERTIFICATE



Program Information

The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to advance technologically, especially in the areas of computerization and sophisticated control systems. Thus, an upward trend increases in the changing skill sets required for successful service technicians. Students who are passionate about progressive technology and are interested in a satisfying, high-demand career based on skill should explore the San Jacinto College Air Conditioning Technology program.

The San Jacinto College Air Conditioning Technology (HVACR) program:

- Is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial, and/or industrial air conditioning, refrigeration, and heating; and
- Is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration, and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design, and industry code standards are also covered.

Additional Information

The Fast Track to HVACR program allows students to complete an Occupational Certificate in just 16 weeks – one semester.

Upon completion of each certificate, students may register with the Texas Department of Licensing and Regulation (TDLR).

Career Opportunities

Graduates of the Air Conditioning Technology program will enter a high-demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College Air Conditioning Technology program have the opportunity to work as:

- Residential/commercial technicians,
- Industrial or maintenance technicians,

- Independent business owner or contractors, and
- Refrigeration technicians.

Earning Potential

Heating and air conditioning mechanic and installer. \$50,673¹

¹ Source: texaswages.com (<http://texaswages.com>), median salary Gulf Coast region, 2019

For more information, students may contact North campus for Commercial HVACR at 281-998-6150, x7264 or South campus for Residential HVACR at 281-998-6150, x3777.

Campuses

North Campus

South Campus

Information

The Commercial Air Conditioning program is offered at the San Jacinto College North campus. The Residential Air Conditioning program is offered at the San Jacinto College South campus. Both programs offer an Occupational Certificate, a Certificate of Technology, and an Associate of Applied Science (AAS) degree. The North campus also offers the Level 2 Certificate. All courses in each certificate apply to the commercial or residential AAS.

Level 2 Certificate

The Commercial Air Conditioning Level 2 Certificate is comprised of 45 semester credit hours and is designed for those wanting to complete the technical Air Conditioning Technology courses required for a degree but want to enter the job market as soon as possible. All courses on this certificate apply to the Associate of Applied Science (AAS) degree.

Admission

No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the state of Texas. If you have a question about your background and licensure, please speak with your faculty member or Department Chair. Reference Texas House Bill 1508.

Plan of Study

North Campus

5AIRC-C

First Term		Credits
HART 1401	Basic Electricity for HVAC	4
HART 1407	Refrigeration Principles	4
HART 1445	Gas and Electrical Heating	4
HART 2441	Commercial Air Conditioning	4

Credits **16**

Second Term

HART 2331	Advanced Electricity for HVAC	3
HART 2336	Air Conditioning Troubleshooting	3
HART 2301	Air Conditioning and Refrigeration Codes	3

HART 2442	Commercial Refrigeration	4
HART 2368 or HART 2338	Practicum (or Field Experience) - HVAC/R Technology/Technician or Air Conditioning Installation and Startup	3
Credits		16
Third Term		
HART 2302	Commercial Air Conditioning System Design	3
HART 2343	Industrial Air Conditioning	3
HART 2357	Specialized Commercial Refrigeration	3
HART 2434	Advanced Air Conditioning Controls	4
Credits		13
Total Credits		45

Capstone Experience: HART 2368 Practicum (or Field Experience)
- HVAC/R Technology/Technician or HART 2338 Air Conditioning
Installation and Startup