

Manufacturing, Transportation & Industrial Technology

GUIDED PATHWAY: Heating Ventilating Air Conditioning & Refrigeration (Residential) (Certificate)

Industrial and Electronic Technologies Department



The Heating, Ventilation, Air Conditioning and Refrigeration (Residential) program is an intensive program that offers classroom instruction and related lab practice in the field of Residential Air-Conditioning. This is an example course sequence for students interested in pursuing a certificate in Heating, Ventilation, Air Conditioning and Refrigeration, Residential Air Conditioning & Refrigeration, Certificate (C2) or a certificate in HVACR Assistant (C1).

SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS²

C2	C1	SEMESTER 1	ACTION ITEMS
◆	◆	HART 1407-Refrigeration Principles	☐ Meet with your advisor to confirm academic and career goals prior to taking courses and then again before the end of the semester.
◆	◆	HART 1401-Basic Electricity for HVAC	
◆	◆	MAIR 1449-Refrigerators, Freezers & Window A/Cs	
◆	◆	HART 2438-Air Conditioning Installation and Start up	
TOTAL SEMESTER CREDIT HOURS: 16			
C2		SEMESTER 2	ACTION ITEMS
◆		HART 1356-EPA Recovery Certification Preparation	Get with an HVAV instructor to get your EPA certification
◆		HART 1445-Gas and Electrical Heating	
◆		HART 2331-Advanced Electricity for HVAC	
◆		HART 1441-Residential Air Conditioning	
TOTAL SEMESTER CREDIT HOURS: 14			
C2		SEMESTER 3	ACTION ITEMS
◆		HART 2436-Air Conditioning Troubleshooting	Student completes Residential Air Conditioning and Refrigeration Certificate Apply for certificate and graduation
◆		HART 1451-Energy management	
◆		HART 2280-Cooperative Ed Heating, Air Conditioning and Ref	
◆			
TOTAL SEMESTER CREDIT HOURS: 10			
TOTAL SEMESTER CREDIT HOURS:			
SEMESTER CREDIT HOURS/PATHWAY TOTAL: 40 SEMESTER CREDIT HOURS			

¹. Degree plans may change in later catalogs. Be sure to consult with your advisor if you are continuing on an older degree plan.

Certification and Licensure Information

The HVAC program offers students the EPA test in order to achieve the EPA certification. This certification is required by the state to handle refrigerants.

Career Information

Common Job Titles

Air Conditioning technicians start about \$12.00/hr and highly experienced workers can earn as much as \$30.00/hr. in this region. Over the last year, several local companies have posted jobs for Air Conditioning Techs in the Laredo area.

Regional Labor Market Information

Career and labor market research tools

Bureau of Labor Statistics: <http://www.bls.gov/ooh/>, O*NET: <https://www.onetonline.org/>

Career Resources: Laredo College career services website provides information on career exploration and employment. Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an LC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.

webpage http://www.laredo.edu/cms/LCC/Student_Services/Student_Success_Center/Student_Success_Center_2018/Academic_Advising/Career_Exploration_Services/ for the *career advising and jobs*.