### Manufacturing, Transportation & Industrial Technology

GUIDED PATHWAY: Heating, Ventilation, Air Conditioning and Refrigeration (Commercial) (Certificate)

**Industrial and Electronic Technologies Department** 

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



C2	C1	SEMESTER BY SEMESTER MAP FOR SEMESTER 1	ACTION ITEMS
<b>♦</b>	<b>*</b>	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.
<b>♦</b>	•	HART 1401-Basic Electricity for HVAC	
<b>♦</b>	•	MAIR 1449-Refrigerators, Freezers & Window A/Cs	
<b>♦</b>	•	HART 2438-Air Conditioning Installation and Start up	
		TOTAL SEMESTER CREDI	Γ HOURS: 16
C2		SEMESTER 2	ACTION ITEMS
<b>♦</b>		HART 1356-EPA Recovery Certification Preparation	Get with an HVAC instructor to get your EPA certification
<b>♦</b>		HART 1445-Gas and Electrical Heating	
<b>♦</b>		HART 2331-Advanced Electricity for HVAC	
<b>♦</b>		HART 2349- Heat Pumps	
		TOTAL SEMESTER CREDIT	THOURS: 13
C2		SEMESTER 3	ACTION ITEMS
<b>♦</b>		HART 2341- Commercial Air Conditioning	Meet with your advisor to apply for the Commercial Air Conditioning Certificate and sign up for commencement
<b>♦</b>		HART 2442- Commercial Refrigeration	
<b>*</b>		HART 2280-Cooperative Education Heating, Air Conditioning and Refrigeration	
		TOTAL SEMESTER CREDI	T HOURS: 9
		SEMESTER CREDIT HOURS/PATHWAY TOTAL	L: 38 SEMESTER CREDIT HOURS

## **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**

**Technicians HVAC Technician Air Condition Technician** 

#### **Regional Labor Market Information**

Air Conditioning Technicians tart 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.

#### **Career and Labor Market Research Tools**

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

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.