

# GUIDED PATHWAY: AIR CONDITIONING AND REFRIGERATION TECHNOLOGY – RESIDENTIAL A.A.S.

MANUFACTURING and INDUSTRIAL TECHNOLOGY CAREER PATH



For more information, visit the [Dallas College Air Conditioning and Refrigeration Technology webpage](http://www.dcccd.edu/ACR) [www.dcccd.edu/ACR] and your academic advisor at the Cedar Valley or Eastfield Campus.

This is an example course sequence for students interested in pursuing Residential – Air Conditioning and Refrigeration Technology. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an Associate of Applied Science (A.A.S.) degree in Air Conditioning and Refrigeration Technology-Residential. Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by Dallas College. See catalog for [official degree requirements](#).

The A.A.S. degree in Residential – Air Conditioning and Refrigeration Technology is designed to train students to meet employment requirements in the field of residential air conditioning. This will include the installation, repair and maintenance of residential air conditioning equipment. Included in this program is the study of residential air conditioners, heat pumps, gas and electric furnaces, humidifiers, and the design of residential air conditioning systems. Throughout the entire program an emphasis is placed on current techniques used by service technicians. Courses that complete the degree, [Residential - Technician I Certificate](#) (C1) and [Residential - Technician III Level II](#) (C2) Certificate are noted below.

Visit the [NTCCC Transfer Consortium](#) to view guided pathways created for students who complete an A.A.S. degree and the options for transfer to complete a Bachelor of Applied Arts and Science. Speak with an academic advisor at your campus to choose courses that will help you to transfer to a specific university.

Catalog Year	2020-2021	You may use this pathway if you entered Dallas College on or before this date.
Degree Type	Associate of Applied Science	
GPA Requirement	Student must earn a GPA of 2.0 or higher	
<a href="#">TSI</a>	Must be Complete	

## SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students. This is not an official degree plan. See catalog for [official degree requirements](#).

### AAS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS

#### SEMESTER 1

Total Hours: 15

[HART 1401](#) – Basic Electricity for HVAC *Course is taught in a 5-week format. (Course also applies to C1, C2)*

[HART 1403](#) – Air Conditioning Control Principles *(Course also applies to C1, C2)*

[HART 1407](#) – Refrigeration Principles *Course is taught in a 5-week format. (Course also applies to C1, C2)*

[ENGL 1301](#) – Composition I *This is a Core course. You must earn a grade of "C" or better. (Course also applies to C2)*

#### SEMESTER 1 ACTION ITEMS

1. Meet with your advisor to confirm academic and career goals before the end of the semester.
2. Meet with a career advisor or coach to research your career options and opportunities for job shadowing.

#### SEMESTER 2

Total Hours: 15

[HART 1441](#) – Residential Air Conditioning *(Course also applies to C1, C2)*

[HART 1445](#) – Gas and Electric Heating *(Course also applies to C1, C2)*

[HART 2449](#) – Heat Pumps *(Course also applies to C1, C2)*

[MATHEMATICS ELECTIVE](#) *This is a Core course. You must earn a grade of "C" or better. (Course also applies to C2)*

\* There are several options to fulfill this requirement. See your academic advisor for a specific list.

### **SEMESTER 2 ACTION ITEMS**

1. Meet with your advisor to request an official program of study audit and confirm or update your academic and career path and program of study.
2. Apply for the Residential – Technician I Certificate Completion.

## **SEMESTER 3**

**Total Hours: 14**

[HART 2438](#) – Air Conditioning Installation and Startup *(Course also applies to C2)*

[HART 2445](#) – Residential Air Conditioning Systems Design *(Course also applies to C2)*

[HUMANITIES/FINE ARTS ELECTIVE\\*](#) *This is a Core course.*

[SPCH 1311](#) – Introduction to Speech Communication *This is a Core course.*

\* There are several options to fulfill this requirement. See your academic advisor for a specific list.

### **SEMESTER 3 ACTION ITEMS**

1. Meet with a career advisor or coach for assistance in preparing for job search.
2. Meet with a faculty or career advisor regarding placement for the Cooperative course.

## **SEMESTER 4**

**Total Hours: 16**

[HART 2436](#) – Air Conditioning Troubleshooting *(Course also applies to C2)*

[PSYC 2301](#) – General Psychology *This is a Core course.*

**ELECTIVES\*** *(2 Courses) (Both courses also apply to C2)*

**CHOOSE ONE:** [HART 1394](#) – Special Topics in Heating, Air Conditioning and Refrigeration Mechanic and Repairer **OR**

[HART 2380](#) – Cooperative Education-Heating, Air Conditioning and Refrigeration

\* Must select Elective course from the following: Any 3 credit-hour HART course not previously identified as part of the award pattern. **OR** Any 3 credit-hour course from: ACNT 1303, BUSI 1301, COSC 1301, SPAN 1300

### **SEMESTER 4 ACTION ITEMS**

1. After reviewing your program of study, meet with your advisor to apply for the Air Conditioning and Refrigeration Technology - Residential A.A.S. and the Residential – Technician III Certificate.
2. Sign up for Commencement.
3. Join the [Alumni Network!](#)

**PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS**