

**Program****AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY**

- *Diploma, Certificate*
- *Diploma Day Program:* 3 semesters, including 1 summer term
- *Comfort Systems Technology Night Program:* 2 semesters if started in Fall
- *Admission Cycle:* Fall semester strongly recommended due to prerequisites, but not mandatory
- *Maximum Number Admitted Annually:* 16-20

**Career Description**

Air Conditioning, Heating, and Refrigeration Mechanics work in a variety of job applications. Repair or replace defective equipment, components or wiring in residences or commercial establishments. Skilled mechanics are also needed to repair icemakers or walk in coolers in the food service or supermarket industries.

**Careers Available**

Technicians often specialize in either installation or maintenance and repair, although they are trained to do both. They also may specialize in doing heating work or air-conditioning or refrigeration work. Some specialize in one type of equipment—for example, hydronics (water-based heating systems), solar panels, or commercial refrigeration. Advancement usually takes the form of higher wages. Some technicians, however, may advance to positions as supervisor, service manager, or self-employed.

**Entry-Level Salary**

\$22,860 - \$28,420/yr.

**Course of Study**

Students learn to work with a variety of tools, develop troubleshooting skills, system design, electricity and controls with an emphasis on safety. Graduates should be able to assist in the startup, service, repair, and/or installation of residential and light commercial systems.

**Recommended Courses and Skills**

Math, blueprint reading, business courses, electricity and electronics.

**Helpful Personal Attributes**

Good people skills, able to work alone, enjoy working with hands and a problem solver.

**Program Contact**

If you would like additional information about the Air Conditioning, Heating & Refrigeration Technology Program, contact Dwight Cornelison, Program Coordinator, at 336.734.7285 or [dcornelison@forsythtech.edu](mailto:dcornelison@forsythtech.edu).

**How To Get Started**

You may pick up an application at the Admissions Office, 123 Allman Center on the Forsyth Tech Main Campus, 2100 Silas Creek Parkway in Winston-Salem. You may also request an application by calling 336.734.7253, or you may apply online at [www.ForsythTech.edu](http://www.ForsythTech.edu).



## AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools, and instruments.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems.

### Diploma

#### Fall Semester

AHR 110 Intro to Refrigeration  
 AHR 111 HVACR Electricity  
 AHR 112 Heating Technology  
 AHR 210 Residential Building Code  
 MAT 101 Applied Mathematics I

#### Spring Semester

AHR 113 Comfort Cooling  
 AHR 114 Heat Pump Technology  
 AHR 130 HVAC Controls  
 ENG 101 Applied Communications I

#### Select one:

AHR 250 HVAC System Diagnostics  
 COE 111 Co-Op Work Experience I  
 WLD 112 Basic Welding Processes

#### Summer Term

AHR 160 Refrigerant Certification  
 AHR 211 Residential System Design  
 AHR 212 Advanced Comfort Systems

**Total Credit Hours: 40 - 41**

If you would like additional information about the Air Conditioning, Heating & Refrigeration Technology Program, contact Dwight Cornelison, Program Coordinator, at 336.734.7285 or [dcornelison@forsythtech.edu](mailto:dcornelison@forsythtech.edu).

### Certificate

#### Fall Semester

AHR 111 HVACR Electricity  
 AHR 112 Heating Technology  
 AHR 160 Refrigerant Certification

#### Spring Semester

AHR 113 Comfort Cooling  
 AHR 114 Heat Pump Technology

**Total Credit Hours: 16**