

Air Conditioning, Heating and Refrigeration Technology

The Air Conditioning, Heating and Refrigeration Technology (AHR) curriculum provides the basic knowledge for developing skills fundamental to working with residential and light commercial systems. Graduates can assist in the start-up, preventive maintenance, service, repair, and installation of residential and light commercial systems. A.A.S. graduates also can articulate an understanding of system selection, air balancing, building automation, system applications, and indoor air quality.

Topics include heating, comfort cooling, refrigeration, electricity, and schematic diagrams, along with residential and commercial controls methodologies. Two nationally recognized certificates in Building Automation are available, along with EPA 608 certification, as required by the Environmental Protection Agency for all technicians who handle refrigerants.

Most classes include extensive hands-on exposure and training with industry tools and instruments working on equipment types such as air conditioning, furnaces, heat pumps, mini-splits, and advanced, computer-controlled systems. Safety is integral to all coursework. Students are immersed in discussions around the mechanical and fuel gas codes, residential system sizing, advanced comfort systems, and indoor air quality, among other discipline discussions.

Throughout the program, students are exposed to the Critical Core, an articulated pathway for students to achieve proficiency in Critical Thinking, Communication (Written & Oral), Personal Growth & Cultural Literacy, and Information Technology & Quantitative Literacy. The Critical Core empowers all AHR students to achieve academic, professional, and personal success.

For specific information about potential positions and wages in air conditioning, heating, and refrigeration employment, visit the Central Piedmont Career Coach website.