

Heating and Air Conditioning Technology

Certificate & Associate of Science • West Hills Center

The Heating and Air Conditioning Technology Certificate program is designed so that students can learn installation, service and maintenance of HVAC equipment in a hands-on environment. The seven courses offered in the HVAC program will enable graduates to grasp the fundamental concepts of electricity, refrigeration, heating and air conditioning as well as installation and preventive maintenance procedures. A large part of each HVAC course involves working on laboratory projects. Upon successful completion of this program, graduates may find employment as HVAC service technicians, refrigeration service technicians or as installers.

The Heating and Air Conditioning Technology Associate of Science program prepares students to not only install, repair and maintain refrigeration, heating and air conditioning equipment, but continues their training in advanced courses intended to introduce students to more sophisticated design and application skill techniques. Subjects covered include: estimating thermal loads, duct and hydronic piping design, and controls for more complex circuits including digital technologies. Available as a day or evening program, students



may also earn cooperative education credits. Graduates of the program are qualified to seek employment as HVAC technicians, installers, supervisors, managers or be self-employed.

According to the U.S. Department of Labor, Bureau of Labor Statistics, employment in the heating and air conditioning industry is expected to grow faster than the national average for the next 10 years—by as much as 26%. Job prospects are expected to be excellent, with the growing number of retirements expected to generate many more job openings.

For more information on **CCAC's Heating and Air Conditioning Technology program**, please call 412.788.7500.

CCAC West Hills Center
1000 McKee Road
Oakdale, PA 15071

www.ccac.edu

Heating and Air Conditioning Technology



More than 92% of CCAC graduates live and work in our region.

CERTIFICATE REQUIREMENTS

First Semester		Credits
HAC101	Basic Electrical Wiring	5
HAC201	Heating Systems	5
HAC202	Air Conditioning Systems	5
MMT130	Job Safety & First Aid	1
Second Semester		
HAC102	Refrigeration Systems	5
HAC224	HVAC Installation	2
HAC225	HVAC Preventative Maintenance	2
MAT191	Mathematics for the Industries	3
WLD221	Brazing & Welding	3
HAC107	EPA Refrigerant Certification Prep	1
Minimum credits required to graduate		32

ASSOCIATE'S DEGREE REQUIREMENTS

First Semester		Credits
HAC101	Basic Electrical Wiring	5
HAC201	Heating Systems	5
HAC202	Air Conditioning Systems	5
MMT130	Job Safety & First Aid	1
Second Semester		
HAC102	Refrigeration Systems	5
HAC107	EPA Refrigerant Certification Prep	1
HAC224	HVAC Installation	2
HAC225	HVAC Preventative Maintenance	2
MAT191	Mathematics for the Industries	3
WLD221	Brazing and Welding	3
Third Semester		
ENG101	English Composition 1	3
HAC203	Estimating Thermal Loads	3
HAC221	Circuits & Controls	4
PHY100	Basic Physics	4
SPH101	Oral Communication	3
Fourth Semester		
ENG103	Technical Communications	3
HAC108	Industry Competency Exam Prep (ICE)	1
HAC204	Duct & Hydronic System Design	4
HAC222	Pneumatic Controls for HVAC	3
PSY116	Organizational Psychology	3
Minimum credits required to graduate		63

All information is correct as of date of publication. However, some curriculum requirements may have changed since publication. Please consult the CCAC website at www.ccac.edu to view complete program descriptions and the latest curriculum changes, including information on course prerequisites.

Created by the CCAC Marketing and Communications department.