



Heating, Ventilation, and Air Conditioning

A Technical Certificate Program

PROGRAM DESCRIPTION

The Heating, Ventilation, and Air Conditioning (HVAC) Certificate program prepares individuals for positions in the Heating, Ventilation, and Air Conditioning industry. Instruction is provided in the maintenance, troubleshooting, and installation of HVAC equipment. Instruction in electrical applications and industrial safety will also be provided. After completing program requirements, students should be academically prepared to take the following certification exams:

- EPA 608 Universal Certification Exam
- EPA 609 Mobile Air Conditioning Exam

PROGRAM ARTICULATION

All courses in the Heating, Ventilation, and Air Conditioning certificate program will articulate into the Associate of Applied Science degree program in Industrial Technology - Concentration: Mechanical.

APPLICATION PROCEDURE

A student desiring to pursue a certificate in Heating, Ventilation, and Air Conditioning must:

1. Submit the Northeast State Application for Admission to the Office of Admissions and Records.
2. Indicate Heating, Ventilation, and Air Conditioning as the desired major on the Northeast State application form.
3. See a faculty advisor from Mechanical Technology prior to registering for classes.

GAINFUL EMPLOYMENT DISCLOSURE

As required by the U.S. Department of Education
<https://apps.northeaststate.edu/GainfulEmployment/>

TYPICAL PROGRAM OF STUDY

Course No.	Course Title	Credit
<u>FALL</u>		
ELEC 1010	Introduction to Electricity	4
MECH 1210	Mechanical Transmissions	4
MECH 2310	Hydraulics and Pneumatics I	4
MECH 2410	Refrigeration and Air Conditioning I	4
<u>SPRING</u>		
ENST 1350	Industrial Safety	3
MECH 2420	Refrigeration and Air Conditioning II	4
MECH 2430	Refrigeration and Air Conditioning III	3
MECH 2610	Millwright Principles	4
Total Credit Hours		30

Students must complete learning support deficiencies in English and MATH 0801, or have appropriate entrance scores.

TYPICAL JOB OPPORTUNITIES

HVAC Technician: Installs, repairs, and maintains equipment for heating, air conditioning, and refrigeration.

PROGRAM COMPETENCIES

1. Program, install, and troubleshoot HVAC systems in conformance with EPA guidelines and other relevant codes.
2. Identify, analyze, install, and troubleshoot electronic circuit parameters for the operation and control of general electrical components.
3. Demonstrate ability to properly use, identify, and interpret diagrams, blueprints, equipment manuals and associated tools in the maintenance and repair of electrical and mechanical equipment.
4. Demonstrate, perform, and adhere to appropriate OSHA safety standards in the mechanical industry including basic and intermediate rigging methods.

FOR FURTHER INFORMATION CONTACT:

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Northeast State Community College is part of the Tennessee Board of Regents system, Tennessee's largest higher education system, governing 40 post-secondary educational institutions with over 200 teaching locations. The TBR system includes 13 two-year colleges, 27 colleges of applied technology, and TN eCampus, providing programs to students across the state, country, and world.

Northeast State Community College does not discriminate on the basis of race, color, religion, creed, ethnic or national origin, sex, disability, age status as a protected veteran or any other class protected by Federal or State laws and regulations and by Tennessee Board of Regents policies with respect to employment, programs, and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Linda W. Calvert, Vice President for Administration & Grant Development, AffAct@NortheastState.edu, P.O. Box 246, Blountville, TN 37617-0246, 423.323.0222.

Northeast State Community College's policy on nondiscrimination can be found at <https://apps.northeaststate.edu/ie/policymanual/pol.asp?p=254>.

Northeast State Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award the associate degree. Questions about the accreditation of Northeast State may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).