



Career & Technical Education (CTE)

HVAC



www.moboces.org
(315) 361-5700



★ Overview

The HVAC program prepares students for careers in the Heating, Ventilation, Air Conditioning, and Refrigeration fields, as well as giving an introductory look at the fast-growing Renewable Energy sector. Students will learn how to safely design, install and maintain heating and cooling systems used in residential and commercial buildings. Students will also be taught the fundamental principles and skills related to the safe installation and repair of electrical components related to these systems. The program's focus on expectations and how to function as a professional trade technician may lead to future employment opportunities.

Students who enjoy science courses, such as physics, may find the electrical aspect especially interesting as it requires the use of physics principles, laws and applications. A fully-equipped lab provides students with opportunities to apply what they have learning in class to real-world projects and a partnership with SUNY Morrisville allows students to be exposed to the latest industry standards and equipment.

★ Units of Study

- Safety
- Heating
- Refrigeration
- Design Theory
- Wiring
- Electrical Theory
- Mechanical Controls
- Renewable Energy
- Environmental Controls
- Transformers



★ Career Options

- HVAC Technician
- Refrigeration Mechanic
- Solar/Windmill Technician
- Product Installation Specialist
- Electrical Repair Technician
- Electrician

★ Equipment Needed

- Uniform, hat and leather work boots (personal protective equipment provided by CTE)
- Basic electrical tools
- Notebook & Four colored pen

★ Class Format

Classroom instruction and hands-on projects



★ Course Credits

With the completion of the 2-year program, a student would earn a total of 7.5 credits:

- 3 Units of CTE
- 1 Unit each of English 12, Math, and Science
- 1 Unit of Government and Economics
- .5 Unit of Career and Financial Management

Eligible for NYSED's 4+1 Graduation Option

★ Features and Benefits of CTE

- **Work-Based Learning:** Internship experiences with local business partners provide students with employment connections and networking opportunities.
- **Technical Endorsement:** Students may earn a Technical Endorsement to their Regents Diploma by passing a nationally recognized industry exam.
- **Industry Credentials:** Students may gain industry credentials by earning professional certifications, licenses, and other credentials through CTE courses.

★ Leadership Opportunities through CTE

- Regional, State and National competitions
- National Technical Honor Society
- NOCTI National Accreditation
- SkillsUSA

★ College Articulations/Industry Connections

- Alfred State College
- Mohawk Valley Community College
- Lincoln Technical Institute
- University of Northwestern Ohio
- National Center for Construction Education and Research (NCCER)

★ More Information

Contact your guidance counselor, call our CTE office, attend an open house, or visit us online.