



# Residential Electrical, Plumbing & HVAC

## Program Description

Residential Electrical, Plumbing & HVAC program trains students in residential electrical, house wiring and industrial motor control. HVAC (Heating, Ventilation, Air Conditioning and Refrigeration) includes basic electrical, heating equipment installation, sheet metal fabrication and installation, air conditioning installation and refrigeration theory.

Students master core instruction and move into trade-specific and advanced training to learn to design, adjust, repair, install and/or sell in areas related to electrical, plumbing, and HVAC. Instruction is delivered in a hands-on environment, working in small groups or independently, utilizing self-paced materials that offer a wide variety of activities.

Students occasionally work on a construction site, performing real job tasks related to their area of training. Co-op and work experience are integral to the program's training methods. Also, students can participate in SkillsUSA, a student organization that promotes leadership and job skills.

## Related Professions

- Electrician
- Journeyman Plumber
- Journeyman HVAC

## Lapeer County Education and Technology Center

690 N. Lake Pleasant Rd.  
Attica, MI 48412  
(810)664-1124  
[www.lapeerisd.org](http://www.lapeerisd.org)

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## Articulations:

**Davenport University** (up to 30 credits)

**Ferris State University:**

HVAC 101-4 credits

EEET 111-1 credit

EEET 114-4 credits

EEET 122-4 credits

**Mott Community College:**

ELEC131-Residential Wiring (3 credits)

**Oakland Community College:**

TER 1114-Intro to Refrigeration (4 credits)

TER 1120-Sheet Metal/Fab (3 credits)

TER 1610-Forced Air Heating (4 credits)

**Univ of Northwestern Ohio:**

HV 101-Service & Procedures (6 credits)

## Possible Certifications:

**HVAC Core: Refrigerant and Recovery Certification**

**Career Safe-5hr**

**OSHA Safety-10hr**

## Program Success Indicators

### Academic

- Linear measurement to 1/16"
- Add and subtract fractions
- Add, subtract, multiply, and divide whole numbers
- Calculate percentages
- Read and write at age appropriate level
- Be able to understand written directions
- Area/cubic area

### Interpersonal

- Able to follow written safety rules
- Be a self starter and independent worker
- Positive attitude/consistent attendance
- Interest in program area
- Ability to work in a group setting

### Program specific

- Physically able
- Enjoy Hands-on work
- Willingness to work in adverse weather conditions
- Willingness to work at extreme heights
- Willingness to work in confined spaces

### Instructor:

**Doug Wright**

(810)664-1124 ext 4134

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*Paraprofessional: George Britton*