

Required Uniform

1. **Light Blue Work Shirt** - Button-Down

- a. Short OR Long Sleeve
- b. NOT Polo Shirt
- c. Example ----->
- d. Options:
 - i. [Red Kap Website](#)
 - ii. [Amazon Website](#)
 - iii. [Walmart Website](#)



2. **Black Work Pants** - Any Style

- a. NOT Dress Pants or Sweat Pants
- b. Example ----->
- c. Options:
 - i. [Red Kap Website](#)
 - ii. [Amazon Website](#)
 - iii. [Walmart Website](#)



3. **Black Belt** - Any Style

4. **Steel OR Composite Toe Work Boots**

- a. Tan, Brown or Black
- b. NOT Sneakers
- c. Example ----->
- d. Options:
 - i. [Walmart Website](#)
 - ii. [Amazon Website](#)



** You can use the links above to purchase the correct uniform items. If you choose to purchase from another website or store, just make sure the items fit the requirements listed above **

Required Supplies

- 1. 3-Ring Binder with Lined Paper - 1 ½ Inch Minimum - Dividers Recommended
- 2. Black or Blue Pens and Pencils
- 3. Pack of Colored Pencils - 8 or more colors

MERCER COUNTY TECHNICAL SCHOOLS

HVAC/R

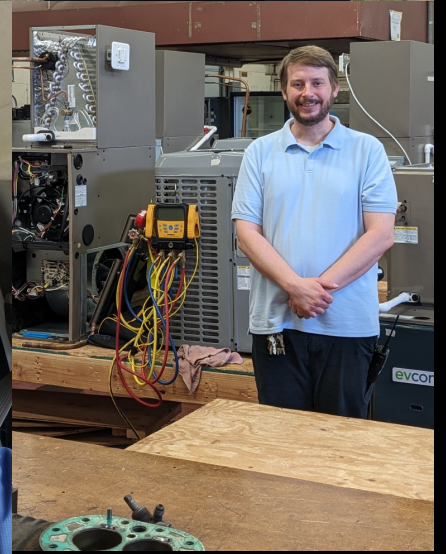
Heating, Ventilation, Air Conditioning & Refrigeration

Mr. Geisz

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WHO AM I?

- College
- Military
- Trade School
- HVACR Service Tech
- Training Apprentices
- Teaching





WHAT IS HVACR?

- Heating – People & Water
- Ventilation – Stale Air, Fresh Air
- Air Conditioning – People
- Refrigeration – Food, Products, Processes

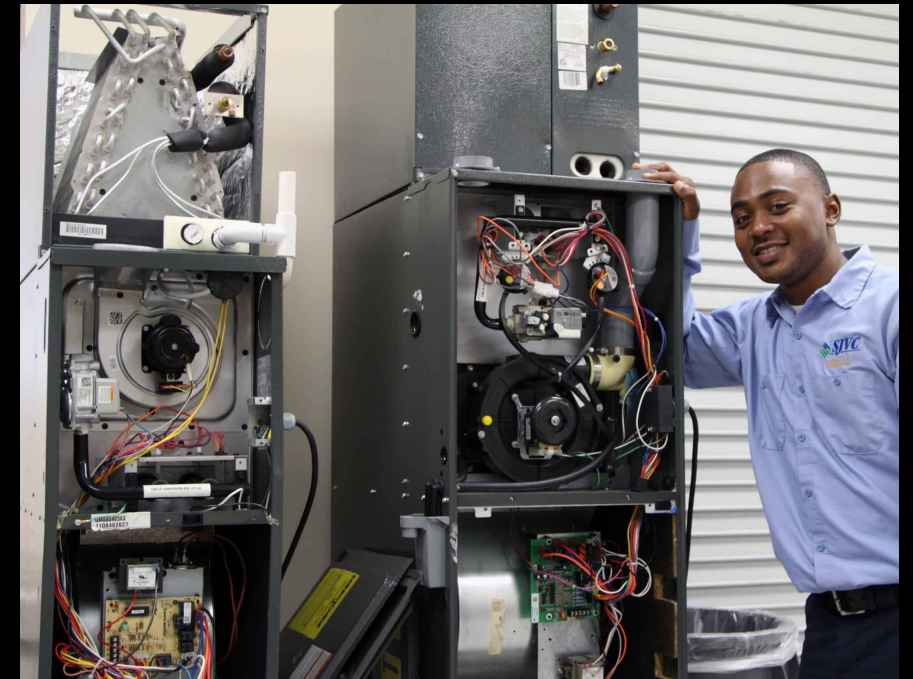
YOU MADE THE RIGHT CHOICE!

- HVACR is needed EVERYWHERE!
 - People need heat and AC
 - Food needs to be Refrigerated
 - Can fix almost anything in your house
 - Always have work



CAREER OPPORTUNITIES

- Residential, Commercial, and/or Industrial Technician
 - Maintenance
 - Installer
 - Service
- Building Automation & Controls
- System Design Engineer
- Energy Auditor
- Many more!





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Furnace
&
Water
Heater

>>>>>>>

<<<<<<<

AC

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Industrial Chiller in Princeton



Industrial Pump Station



COURSE OVERVIEW

- Year 1

- OSHA 10 Certification
- Installing Central Heat & AC
- Basic Maintenance & Repair

- Year 2

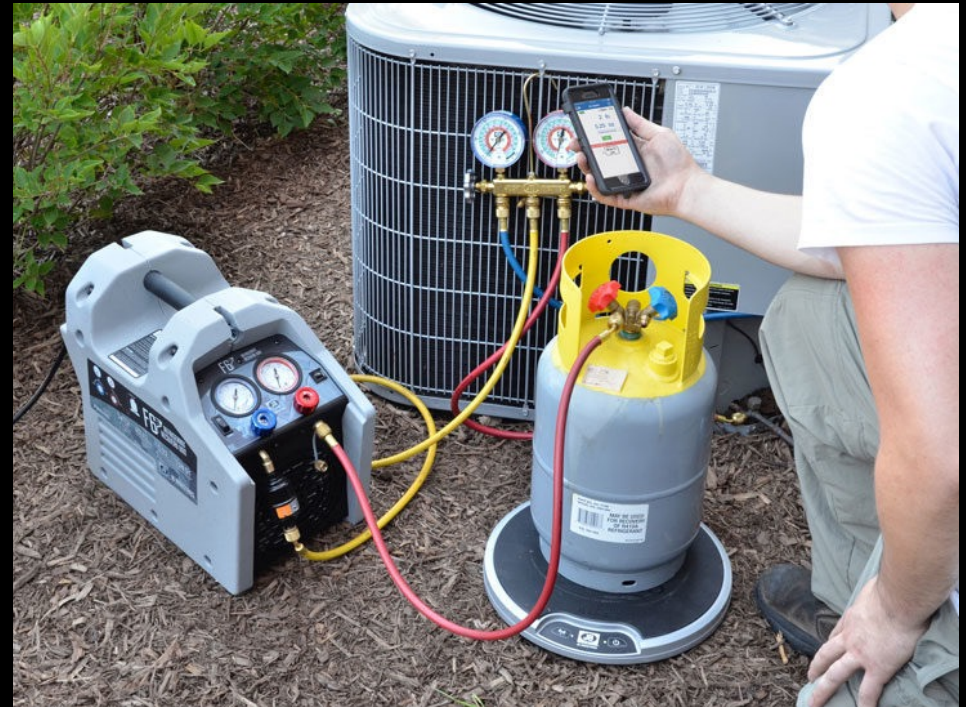
- EPA Certification
- Skills USA
- CIE Program
 - Learn While You Work!
- Service & Troubleshooting
- Commercial & Industrial HVAC/R

CLASS STRUCTURE

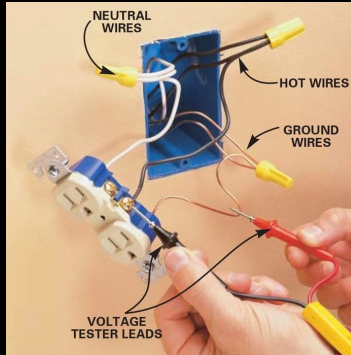
- Change into Uniforms, Attendance & Announcements
- Class Time – About 45 Minutes
 - Interplay Learning
 - Lessons, Videos, Classwork
 - Demonstrations
- Shop Time – About 1 Hour and 15 Minutes
 - Demonstrations
 - Hands-on Projects
- Change out of Uniforms, Bus back to Sending School

WHAT WILL YOU DO?

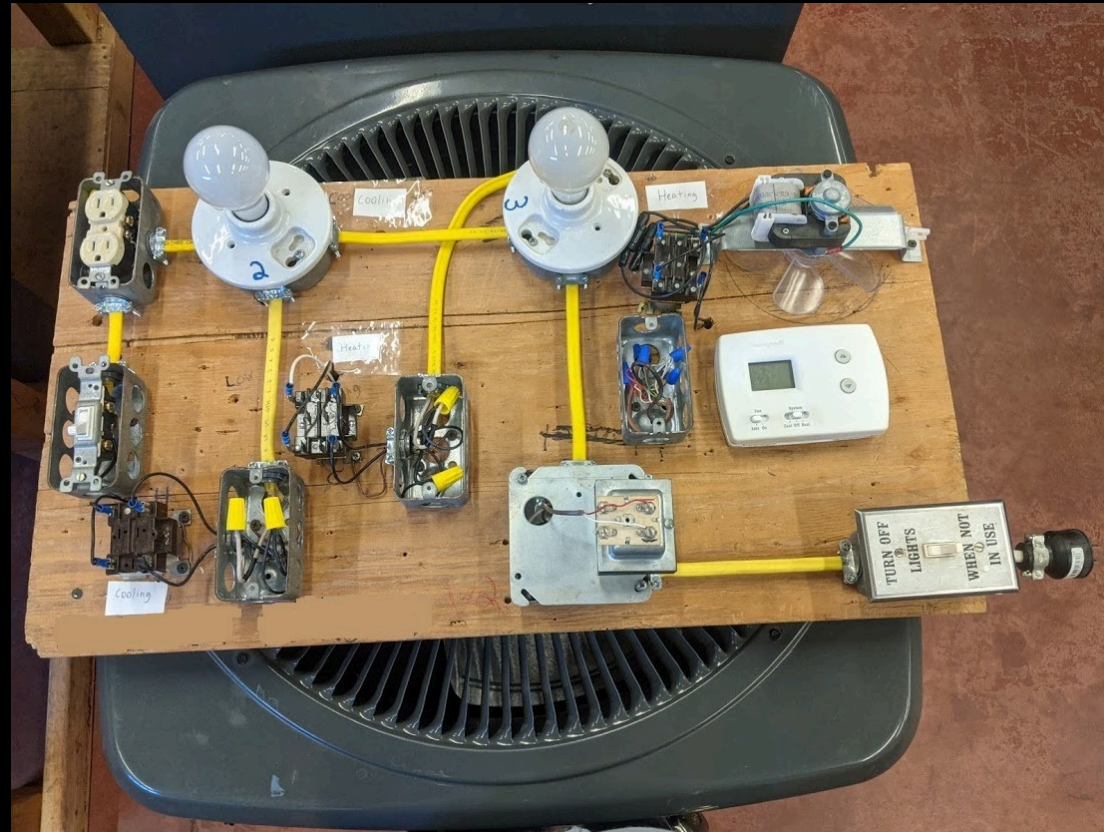
- Work on Air Conditioning and Refrigeration
 - Check Pressures
 - Charge
 - Add refrigerant
 - Recover
 - Remove refrigerant
 - Evacuate
 - Eliminate moisture



WHAT WILL YOU DO?

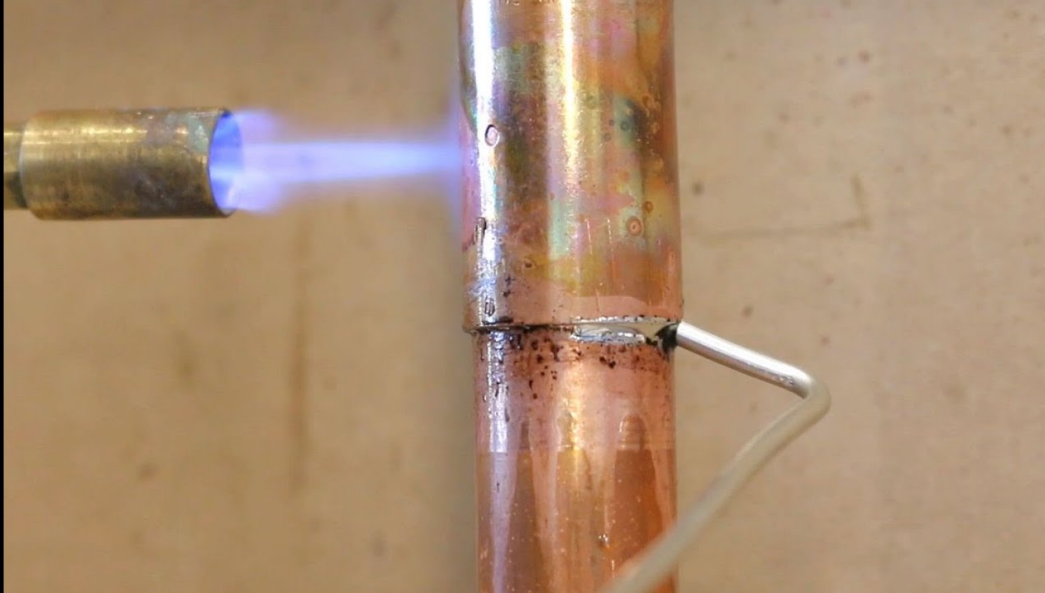


- Electrical
 - Tools
 - Parts
 - Equipment
 - Wiring
 - Troubleshooting



WHAT WILL YOU DO?

- Solder Copper



- Braze Copper

EXPECTATIONS

- We treat our classroom and workshop like it is a worksite
 - Treat everyone with Respect
 - Wear PPE for Safety
 - Take care of our Tools & Equipment
 - Show up on Time, In Uniform, Prepared, and Try

WHAT DO YOU NEED TO BRING?

- Three-ring Binder with Lined Paper
 - Optional: Dividers
- Pens & Pencils
- Colored pencils (8 or more colors)
- Optional but Recommended:
 - Calculator (with Fractions)
- Shop Uniform

SHOP UNIFORM

- BLACK work pants (No Jeans)
- Light BLUE button-down work shirt
 - Short or long sleeve
- Steel or Composite Toe Boots
(No Shoes or Sneakers, just Work Boots)
- Optional: Work Gloves
- Sweatshirts can be worn UNDER Work Shirt (Get larger shirt)
- All required uniform items can be purchased on Amazon or at Walmart
 - Order now, stock is less in the fall



HOW TO PREPARE FOR 1ST DAY

- Complete Orientation Documents
 - Turn in over summer or bring on first day
- Purchase & Bring Uniforms
 - Recommend 2 sets of Shirts/Pants
- Purchase & Bring Supplies
 - Binder, Lined Paper, Pens/Pencils, Colored Pencils
- Email me with any questions or concerns:
 - tgeisz@mcts.edu



WELCOME
TO
HVAC/R!