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| **HVAC****47.0201** |
| **Objective of Technical Education-** * Upon successful completion of this program, students will be prepared for an entry level HVAC technician position AND to advance their technical education.
* Students are offered the opportunity to acquire the technical knowledge and skills involved in installing, repairing, trouble shooting, and maintaining heating, ventilation, and refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.
* Students are offered the opportunity to learn pipe threading, A/C charging, boiler/piping installation, gas installation, blue print reading, AND how to use technical manuals.
* Students are instructed on how to connect heating or air conditioning equipment to fuel, water, or refrigerant source to form a complete circuit.
* Students are taught the required safety practices and procedures, AND can earn certifications.
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| **PROGRAM SAFETY REQUIREMENTS** | * LADDER SAFETY
* IMPULSE CONTROL/SELF-CONTROL
* ABILITY TO REMAIN IN WORK AREA & WITH WORK PARTNER
* CHEMICAL SAFETY
* MAINTENANCE OF CLEAN, ORGANIZED, CLUTTER-FREE WORK AREA.
* SAFETY SHOES, HARD HATS, SAFETY GLASSES, HEAVY WORK BOOTS, SAFETY GLOVES
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| **APTITUDES, ABILITIES/SKILLS** | * REASONING
* IDENTIFY A PROBLEM & FIGURE OUT THE BEST WAY TO SOLVE IT=PROBLEM SOLVING ABILITIES
* GOOD LISTENING SKILLS
* COMMUNICATE IN A COOPERATIVE MANNER WHEN SPEAKING WITH CUSTOMERS, COLLEAGUES, EMPLOYERS
* COMFORTABLE AND ABILITY TO SPEAK BY PHONE WITH CUSTOMERS
* INDEPENDENCE
* DEPENDABLE
* INNOVATIVE
* PAY CLOSE ATTENTION TO DETAILS
* PERSISTENCE
* SELF-CONTROL
* ABILITY TO RECEIVE, UNDERSTAND INFORMATION, AND APPLY IT TO WORK ON HVAC SYSTEMS, SAFELY.
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| **ACADEMIC SKILLS****READING** **MATH** **SCIENCE**  | * TEXT BOOK READING LEVEL 11th GRADE
* GOOD READING COMPREHENSION SKILLS
* TEACHER-MADE PRESENTATIONS, ONLINE MATERIALS AND RESOURCES ARE USED
* WRITING SKILLS
* CALCULATE & ESTIMATE COSTS
* UNIT OF MEASUREMENT CONVERSIONS
* UNDERSTANDING OF ALGEBRA I CONCEPTS
* DEMONSTRATE PROBLEM SOLVING SKILLS
* READING/STUDYING BLUEPRINTS
* UNDERSTADNING OF WORD PROCESSIGN SOFTWARE
* PHYSICS
* CHEMISTRY
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| **PHYSICAL REQUIREMENTS** | * ABILITY TO CROUCH, STRETCH, REACH ACROSS FOR EXTENDED PERIODS OF TIME
* ABLE TO TOLERATE HEIGHTS AND CLIMB AND REMAIN ON A LADDER FOR EXTENDED PERIODS OF TIME
* ABLE TO TOLERATE GETTING DIRTY
* KEEP YOUR ARMS AND HANDS STEADY, AND MAINTAIN A POSITION.
* ABILITY TO LIFT HEAVY OBJECTS (50 LBS+)
* PUT TOGETHER SMALL PARTS WITH YOUR FINGERS
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| **SOFT SKILLS** |  * COOPERATE & COMMUNICATE WITH OTHERS
* ABILITY TO WORK WITH OTHERS TO SHARE IDEAS AND SOLVE PROBLEMS TOGETHER
* USE TIME WISELY
* CONDUCT ONESELF MATURELY
* ACCEPT DIRECTIVES & CONSTRUCTIVE CRITICSM
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| **CLASSROOM ASSIGNMENTS,****ASSESSMENTS & TASKS** | * CLASSWORK/HOMEWORK
* TEACHER MADE TESTS/QUIZZES
* PROJECTS
* LAB TASK COMPLETION
* WORK ETHIC/PERFORMANCE
* TIME CARDS/JOURNALS
* UNIT CHECKS (VERBAL AND WRITTEN)
* CERTIFICATION MODULES COMPLETION AND ATTAINMENT
* NOCTI (END OF 12TH GRADE)
* BENCHMARK ASSESSMENTS (PRE-NOCTI)
* TASK LIST- PROGRAM OF STUDY
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| **INDUSTRY CERTIFICATIONS** | * OSHA Certification
* CERTIFICATION CONSTRUCTION
* 608 EPA CERTIFICATION
* GAS TITE
* NOCTI
* LADDER CERTIFICATION
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| **PROGRAM UNIFORM/COSTS/MATERIALS** | * SAFETY GLASSES (1 PAIR PROVIDED)
* WORK SHIRT (1 PROVIDED; ADDITIONAL SHIRTS= $20)
* JEANS OR WORK PANTS- $20+
* HIGH TOP STEEL TOE WORK BOOTS ($50+)
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| **ARTICULATION AGREEMENTS** | * LCCC
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| **COOPERATIVE OPPORTUNITIES** | * BASED ON JOB AVAILABILITY, TEACHER RECOMMENDATION, GRADES OF 77% AND HIGHER, GOOD ATTENDANCE, GOOD BEHAVIOR, DRIVER’S LICENSE AND OWN TRANSPORTATION
* R.F. OHL
* ANDREAS PLUMBING
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| **EMPLOYMENT OUTLOOK & PROJECTED SALARY** | * OPPORTUNITIES: HVAC MECHANIC, REFRIGERATION MECHANIC, PIPE FITTER, CONSTRUCTION LABORERS, SERVICE TECHNICIAN
* (40 hour work week minimum= $48, 630 (annual average medium)
* Overtime and irregular hours should be expected.
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| **How to find out more?** | * https://www.onetonline.org
* [www.carboncti.org](http://www.carboncti.org)
* <https://youtu.be/WLiegCGHUzs>
* <https://www.mynextmove.org/profile/summary/49-9021.00>
* [Northampton County Area Community College](http://www.northampton.edu/)
* [Lehigh Carbon Community College](http://www.lccc.edu/)
* <https://stevenscollege.edu/>
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