

PROGRAM: Heating, Ventilation and Air Conditioning
(standards to be developed)

**PROGRAM
CIP CODE:** 47.0200

DESCRIPTION: The **Heating, Ventilation and Air Conditioning** program prepares students to apply technical knowledge and skills to repair, install, service and maintain the operating conditions of heating and air conditioning systems. Includes instruction in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity and electronics as they relate to the repair of heating and air conditioning systems.

RECOMMENDED PROGRAM SEQUENCE OF COURSES:

**Career
Preparation** The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

47.0200.10 **Heating, Ventilation and Air Conditioning:** This course will prepare students to use a wide variety of tools and equipment and maintain a safe work environment. The student will develop an understanding of construction math, financial operations, reading blueprints, basic rigging and basic layout techniques. The student will develop skills in oral and written communication as they relate to the industry. This course is designed to help students develop an enhanced understanding of teamwork, employability skills and career opportunities in the field.

-and-

47.0200.20 **Heating, Ventilation and Air Conditioning II:** This course prepares the individual to apply and demonstrate advanced technical knowledge and skills in the industry. This lab based course will provide the students an opportunity to participate in the planning, design and completion of project based activities.

And program may elect to add:

47.0200.75 **Heating, Ventilation and Air Conditioning - Internship:** This course provides CTE students an opportunity to engage in learning through participation in a structured work experience that can either be paid or unpaid and does not necessarily require classroom instruction that involves the application of previously developed Heating, Ventilation and Air Conditioning knowledge and skills.

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47.0200.80 **Heating, Ventilation and Air Conditioning - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences, directly related to the standards identified for the Heating, Ventilation and Air Conditioning program.

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| TEACHER CERTIFICATION REQUIREMENTS FOR THE HEATING, VENTILATION AND AIR CONDITIONING PROGRAM |
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| CAREER PREPARATION: The instructor must be CTE certified according to the following table |
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| Heating, Ventilation and Air Conditioning | CERTIFICATES |
| | Types: PCTI, PCTIEP, SCTI, SCTIEP |
| Note: <ul style="list-style-type: none"> ▪ Heating, Ventilation and Air Conditioning, 47.0200.70 may be a part of the sequence and the teacher must hold a Cooperative Education Endorsement (CEN). ▪ Teacher/Coordinator 47.0200.75 is not required to have a Cooperative Education Endorsement (CEN). ▪ Teacher/Coordinator 47.0200.80 is required to have a Cooperative Education Endorsement (CEN). | |

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| CERTIFICATE ABBREVIATIONS FOR THE HEATING, VENTILATION AND AIR CONDITIONING PROGRAM |
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| Certificate Types | |
| PCTI | Provisional Career and Technical Education Industrial Technology |
| PCTIEP | Provisional Career and Technical Education Industrial and Emerging Technologies |
| SCTI | Standard Career and Technical Education Industrial Technology |
| SCTIEP | Standard Career and Technical Education Industrial and Emerging Technologies |