

Heating, Ventilation, and Air Conditioning (HVAC)

The Construction Trades pathway CTE programs are based on the National Center for Construction Education and Research (NCCER) standards that leads to a national certification for those students who successfully complete Level I and/or Level II curriculum. Pathway options start with the NCCER Core Curriculum for Construction. This provides a strong foundation for all students entering the career field. After the first course, students must pass the National Construction Career Test (NCCT) for the Core and then proceed into a specific trade option. This program prepares students for further education and careers in Heating, Ventilating, and Air Conditioning.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

FOUNDATIONS OF BUILDING AND CONSTRUCTION TECHNOLOGY (CORE)

170104 1 credit Grade 11 Code: CTP

Prerequisite: Concurrently enrolled in HVAC Level I

The Foundations of Building and Construction course is the Core Curriculum of the Construction and Development Cluster. The NCCER Core Curriculum is taught within this course and is the basis for all construction skills. The course includes basic safety, construction math, hand tools, power tools, blueprints, basic rigging, and hands on experiences.

HEATING, VENTILATING, AND AIR CONDITIONING (HVAC LEVEL I)

170105 1 credit Grade 11 Code: CTC

Prerequisite: Concurrently enrolled in Foundations of Building and Construction Technology (CORE)

This course of study includes mastery of trade mathematics, tools of the trade, copper and plastic piping practices, soldering and brazing, ferrous metal piping practices, basic electricity, induction to cooling and introduction to heating.

HEATING, VENTILATING, AND AIR CONDITIONING (HVAC LEVEL II)

170106 2 credits Grade 12 Code: CTP

Prerequisite: Foundations of Building and Construction Technology (CORE) and HVAC Level I

This course of study includes mastery of air distribution systems, chimney, vents and flues, maintenance skills for the service technician, alternating current, basic electronics, and electric heating. Also includes accessories and optional equipment, metering devices, compressors, heat pumps, leak detection, evacuation recovery and charging.