Did you enjoy playing with LEGOs or Rubik's Cubes as a kid? Put your problem solving skills to the test by working with HVAC systems.

Sioux City Community Schools
believe... achieve... succeed

Pathway Description:

This 1-year regional pathway begins to prepare students for the study of air conditioning, heating, and refrigeration for residential and light commercial equipment. Students start training to be HVAC technicians in a real world, hands-on lab environment.

Key Competencies:

- Understand the fundamentals of electricity, including AC and DC theory, Ohm's Law, Electrical Circuits, Electrical Power Generation, Motors, and Transformers.
- Demonstrate electrical safety with the use of energized circuits, voltages, and working equipment.
- Develop the skills needed for all common heating systems.
- Understand the theory and laws governing refrigeration, the operation of refrigeration systems, heat transfer, components, and test equipment.
- Discover soldering and brazing methods and materials used in refrigeration service.
- Interpret reverse cycle heating and the components and controls of auxiliary heat, C.O.P., installation and maintenance of air-to-air and ground source systems, and includes system wiring and electrical troubleshooting.

Courses (HS Credits):

9G41 Basic Electrical Theory (2)
9GH0 Heating Fundamentals (2)
9GH1 Fundamentals of Refrigeration (2)
9GH2 Heat Pumps (2)

Total College Credits: 12

Annual National Average Salary for an HVAC Technician: $40,400

Career Opportunities:

Gas Fitter	HVAC Mechanic
HVAC Technician	

SIOUX CITY CAREER ACADEMY
Pathways to the future