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

**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:**

<table>
<thead>
<tr>
<th>Gas Fitter</th>
<th>HVAC Mechanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC Technician</td>
<td></td>
</tr>
</tbody>
</table>