

### Architecture and Construction CTE Cluster

Our Career and Technical Education (CTE) Pathways in the Architecture and Construction CTE Cluster lead to a credential for employment (certificate, diploma, or degree). Prepare for a career in designing, planning, managing, building, and maintaining the built environment.

#### Available Pathways

Classes are offered at our college campuses in Monroe and Polkton and online. Some classes may be offered at your local high school. Classes are organized into pathways and align with the K-12 curriculum and Career and College Ready Standards adopted by the State Board of Education.

The following CTE pathways are available to eligible high school juniors, and seniors.

#### INTRODUCTION TO HVAC-R CERTIFICATE (C35100PA)

| Course                          | Credits   | Prerequisites  | Semester offered (SPCC Campus) |
|---------------------------------|-----------|----------------|--------------------------------|
| AHR 110: Intro to Refrigeration | 5         | None           | Fall                           |
| AHR 111: HVACR Electricity      | 3         | None           | Spring                         |
| AHR 112: Heating Technology     | 4         | None           | Fall                           |
| AHR 113: Comfort Cooling        | 4         | None           | Fall                           |
| AHR 140: All Weather Systems    | 2         | AHR 112 or 113 | Fall                           |
| <b>Total Credits</b>            | <b>18</b> |                |                                |

#### BASIC HVAC-R CERTIFICATE (C35100PB)

| Course                          | Credits | Prerequisites | Semester offered (SPCC Campus) |
|---------------------------------|---------|---------------|--------------------------------|
| AHR 110: Intro to Refrigeration | 5       | None          | Fall                           |
| AHR 111: HVACR Electricity      | 3       | None          | Spring                         |
| AHR 112: Heating Technology     | 4       | None          | Fall                           |
| AHR 113: Comfort Cooling        | 4       | None          | Fall                           |

|                      |           |  |  |
|----------------------|-----------|--|--|
| <b>Total Credits</b> | <b>16</b> |  |  |
|----------------------|-----------|--|--|

**ENHANCED ELECTRICAL PATHWAY CERTIFICATE (C35130PB)**

| <b>Course</b>                  | <b>Credits</b> | <b>Prerequisites</b> | <b>Semester offered<br/>(SPCC Campus)</b> |
|--------------------------------|----------------|----------------------|---|
| ELC 112: DC/AC Electricity     | 5              | None                 | Fall                                      |
| ELC 117: Motors and Controls   | 4              | None                 | Spring                                    |
| ELC 128: Intro to PLC          | 3              | None                 | Spring                                    |
| DFT 151: CAD I                 | 3              | None                 | Fall                                      |
| HYD 110: Hydraulics/Pneumatics | 3              | None                 | Spring                                    |
| <b>Total Credits</b>           | <b>18</b>      |                      |   |