



COURSES

Principles of Construction

LEVEL 1

Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology I

LEVEL 2

Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II
Sheet Metal (TBD)

LEVEL 3

Practicum in Construction Technology
Practicum in Entrepreneurship (TBD)
Career Preparation I

LEVEL 4

| HIGH SCHOOL/ INDUSTRY CERTIFICATION | CERTIFICATE/ LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/ DOCTORAL PROFESSIONAL DEGREE | OCCUPATIONS | MEDIAN WAGE | ANNUAL OPENINGS | % GROWTH |
|---|--|--|--|---|--|----------------|--------------------|-------------|
| Refrigerant Handling (EPA 608) | Residential HVAC Design for Quality Installation | Business Administration and Management, General | | | Heating, Air Conditioning, and Refrigeration Mechanics | \$41,808 | 3,356 | 26% |
| OSHA 30 Hour Construction | Certified Cost Technician | Mechanical Engineering | | | Sheet Metal Workers | \$37,419 | 1,479 | 17% |
| NCCER HVAC, Level 1 | Precision Sheet Metal Operator Certification | Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician | Construction Engineering Technology/Technician | Construction Engineering | Cost Estimators | \$63,939 | 2,239 | 21% |
| NCCER Sheet Metal, Level 1 | Certified Ventilation System Inspector | Business/Commerce, General | | | | | | |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Shadow an HVAC worker or cost estimator

Career Preparation:
Obtain an NCCER certification in HVAC, Electrical Level 1, Electronic Systems Technician Level 1, or Sheet Metal Level 1

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

The HVAC and Sheet Metal program of study explores the occupations and educational opportunities associated with installing, serving, or repairing heating and air conditioning systems and also the fabrication, assembly, installation, and repair of sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. This program of study may also include exploration into preparing cost estimates for certain construction projects involving heating and air conditioning and sheet metal.



The Architecture and Construction Career Cluster® focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

Successful completion of the HVAC and Sheet Metal program of study will fulfill requirements of the Business and Industry Endorsement.

Program of Study Draft for Public Comment June 2019



COURSE INFORMATION

| COURSE NAME | SERVICE ID | PREREQUISITES (PREQ) COREQUISITES (CREQ) RECOMMENDED PREREQUISITES (RPREQ) RECOMMENDED COREQUISITES (CREQ) | GRADE |
|---|--|--|-------|
| Principles of Construction | 13004220 | None | 9-12 |
| Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology I | 13005800 | RPREQ: Principles of Architecture, Principles of Construction, or Construction Technology I | 10-12 |
| Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II | 13005900 | PREQ: Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology I RPREQ: Principles of Architecture or Principles of Construction | 11-12 |
| Sheetmeal | TBD | TBD | TBD |
| Practicum in Construction Technology | 13005250 (2 credits) 13006450 (3 credits) | PREQ: Construction Technology II; Building Maintenance Technology II; Electrical Technology II; Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II; Plumbing Technology I; or Mill and Cabinetmaking Technology | 12 |
| Practicum in Entrepreneurship (TBD) | TBD | TBD | 11-12 |
| Career Preparation I | 12701300 (2 credits) 12701305 (3 credits) | None | 11-12 |

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER, PLEASE CONTACT:

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