

Architecture and Construction **PATHWAYS**

This Career Cluster prepares learners for careers in designing, planning, managing, building and maintaining the building environment. People employed in this cluster work on new structures, restorations, additions, alterations and repairs. Architecture and construction comprise one of the largest industries in the United States. Based on the latest statistics, this career cluster has 13.8 million jobs. In the next few years, many new jobs will be added and many employment opportunities will result from the need to replace experienced workers who leave jobs.



OPTIONAL RELATED HIGH SCHOOL EXPERIENCES

Career Exploration | Job Shadowing | Work-Based Learning | Career Practicum | Construction Practicum



After you complete an Architecture and Construction pathway in high school, you will be prepared to continue courses with one of the following post-high school partners.



CERTIFICATE
TCAT

\$34,000 - \$56,000*

- HVAC technician
- First-line supervisor of mechanics, installers, & repairers
- Carpenter

TCAT MURFREESBORO
TCAT NASHVILLE
TCAT SHELBYVILLE



ASSOCIATE
COMM. COLLEGE

\$50,000 - \$53,000*

- Civil engineering technician
- Electrical and electronics engineering technician
- Mechanical engineering technician

NASHVILLE STATE COMM. COLLEGE



BACHELOR'S
UNIVERSITY

\$45,000 - \$76,000*

- Construction manager
- Cost estimator
- Surveyor

MIDDLE TENNESSEE STATE UNIVERSITY

*Source: Tennessee Department of Labor

CAREER CLUSTER: ARCHITECTURE & CONSTRUCTION

Residential and Commercial

The Residential & Commercial Construction program of study prepares students for the various disciplines of construction, providing students with the opportunity to develop a holistic understanding of the building systems and components required for a construction project.



Mechanical, Electrical, and Plumbing Systems

The Mechanical, Electrical, & Plumbing Systems program of study prepares students to install, service, and maintain building equipment. Course content is arranged around four sequenced, progressive courses that provide students with the opportunity to understand the principles behind mechanical, electrical, & plumbing systems, to apply basic installation skills, and to safely use and maintain appropriate tools, equipment, and resources to accomplish project goals. The MEP Systems course introduces students to the physical principals involved with these systems and the fundamental skills needed to work with them. In the third level, students have the option to focus in electrical, plumbing, or HVAC/R, and earn an industry credential specific to the focus area.

Electrical

Electrical Systems prepares students for careers as electricians across a variety of residential and commercial environments. Upon completion of this course, proficient students will be able to implement safety procedures and tools to perform operations with device boxes, conduit, raceways, systems conductors, and cable.

Plumbing

Plumbing Systems prepares students for careers in plumbing across a variety of residential and commercial settings. Upon completion of this course, proficient students will be able to implement safety procedures and tools to perform operations with plumbing systems.

HVAC/R

HVAC prepares students for careers in residential and commercial heating, ventilation, air conditioning, and refrigeration. Upon completion of this course, proficient students will be able to demonstrate knowledge and skill in performing basic operations with HVAC systems, with emphasis on safety, tools, and equipment specific to HVAC.