



Architecture & Construction Program Guide

Architecture and Construction programs introduce students to careers in designing, planning, managing, and building structures. Examples of positions in related industries include architects, drafters, surveyors, carpenters, electricians, plumbers, stone masons, welders, heating/air conditioning, industrial maintenance, etc. The construction areas are in high demand with competitive wages.



Start In High School. Follow *Your* Perfect Path.

High Schools

By participating in high school CTAE programs, students can create opportunities to continue their studies in college, pursue an entry-level job, or serve in a related field in the military. (See back for a full list of programs.)

SkillsUSA

SkillsUSA is the Career & Technical Student Organization (CTSO) that gives students an opportunity to participate in career-related competitions across the state and nation, and gain leadership experience.

Certifications

After completing a CTAE pathway, students prepare for certification exams, at CTAE expense, that may qualify them for entry-level jobs and/or college credit. Autodesk Revit and NCCER certification exams are currently being offered.

Work-Based Learning

Students have the opportunity to be released early from school to work in positions related to their CTAE pathways.

Direct-to-Work

Rigorous high school programs prepare students for architecture and construction careers upon graduation.



Sample Entry-Level Positions

Architectural and Civil Drafters	\$51,340
Electrician	\$47,382
Heating/Air Conditioning Technician	\$41,100
Plumber	\$45,614

Data source for the above information: Georgia Department of Labor

Desired Aptitudes & Skills

- Communication
- Teamwork
- Initiative
- Thinking and reasoning
- Attention to details

MCSO Architecture and Construction Programs

Architectural Drawing and Design: Students learn drafting techniques and are introduced to computer-aided drafting and design. Emphasis is placed on the design process, site plans, electrical plans, plumbing plans, and a course portfolio. *(Jordan, Kendrick, and Northside)*

Construction: Students are provided a solid foundation in the areas of carpentry, electrical, plumbing, and masonry. Emphasis is placed on safety on a construction site, the use of hand and power tools, blueprint reading, and detailed application in the various skilled areas. Students are prepared for internships and entry-level employment in a construction setting. *(Carver, Hardaway, and Jordan)*

Heating, Ventilation, Air Conditioning, and Refrigeration: Students are introduced to the basics of the HVACR and Low Voltage Electrical craft trades. They will acquire knowledge of the hardware and systems used by an HVACR technician, basic installation skills, and general knowledge of refrigeration and heating processes, including electronic circuitry, and the integration between electrical and HVACR fields. Students are prepared for internships and entry-level employment in a HVACR setting. *(Jordan)*

Metals: Students are provided a solid foundation in the areas of machining, sheet metals, and welding. Emphasis is placed on safety on the job site, the use of related hand and power tools, introductory skills on the lathe and milling machines, oxyfuel cuts using acetylene and propane gases, and performing welds. Students are prepared for internships and entry-level employment in the field. *(Jordan)*



For more information, contact your school counselor, CTAE Supervisor, or visit the Muscogee County CTAE website by scanning the QR code on this document.



Non-discrimination statement

The MCSO CTAE Department does not discriminate on the basis of race, color, sex (including pregnancy and related conditions), religion, national origin, age, military status, disability, or any other legally protected status in its educational programs and activities, and provides equal access to the Boy Scouts and other designated youth groups as appropriate. Lack of English language skills will not be a barrier to admission and participation. Equity coordinators are available to address allegations of discrimination. For additional information or referral to the appropriate system coordinator, contact Victoria Thomas, CTAE Director, at 2960 Macon Road, Columbus, Georgia 31906; 706-748-2094.