

ARCHITECTURE & CONSTRUCTION

CAREER CLUSTER

PROGRAM OF STUDY:

CONSTRUCTION MANAGEMENT & INSPECTION

Course	Credits	Class Periods	Grade	Location
Principles of Construction & Construction Trades I	3.0	2	11-12	MCTC
Construction Trades II <i>Prerequisites: Construction Trades I and Principles of Construction</i>	2.0	2	12	MCTC



CAREER POSSIBILITIES

- Building Inspector
- Carpenter
- Construction Manager
- Electrician
- HVAC Technician
- Painter
- Plumber
- Project Manager

CERTIFICATION OPPORTUNITIES

First year Construction Trades students will have the opportunity to test for the National Center for Construction Education & Research (NCCER) Core certification. Second year students will have the opportunity to test for the EPA 608 Refrigerant Handling License.

8024V PRINCIPLES OF CONSTRUCTION

1 Credit - taken concurrently with *Construction Trades I*

8192V CONSTRUCTION TRADES I

2 Credits - taken concurrently with *Principles of Construction*

Grades: 11-12

Principles of Construction provides an introduction for students entering the construction industry. Students will gain knowledge of construction safety, construction mathematics, and common hand and power tools. **Construction Trades I** provides skills needed for the building maintenance industry as a technician or supervisor. Students will acquire knowledge and skills in plumbing, electrical, and heating, ventilation, and air conditioning (HVAC) systems. They will learn methods for repair and installation of drywall, roofing, and insulation systems.

8196V CONSTRUCTION TRADES II

Grade: 12 2 Credits

Prerequisites: Principles of Construction and Construction Trades I

This course builds on previously learned skills needed to enter the construction workforce as a building maintenance technician, supervisor, or construction project manager. Through hands-on experience, students will gain further knowledge in Occupational Safety and Health Administration (OSHA) standards, safety devices in electrical circuits, and maintenance of electrical heating, ventilation, and air conditioning (HVAC), and plumbing systems.



PROGRAM EXPERIENCES

These courses provide a unique opportunity to explore diverse careers within the construction industry, giving students insights into potential paths for their future. Beyond the toolbox, construction courses teach teamwork, problem-solving, and safety practices, fostering qualities that extend well beyond construction sites and into any career choice. By engaging in real-world projects, students not only apply academic concepts but also develop a strong work ethic and attention to detail, laying the groundwork for success in various fields. Whether planning to enter the workforce directly or pursue further education, a construction course in high school equips students with skills, knowledge, and a practical mindset that will serve them well.

EXPECTATIONS OF STUDENTS

- Work both independently and as a team to complete projects.
- Display professional behavior in the classroom and the Construction lab area.
- Show willingness to learn theory before going into the Construction lab area for hands-on training.
- Pass multiple safety tests before entering the lab area.