

Skilled trades continue to be among the fastest-growing sectors, driven by ongoing demand and a wave of retirements among experienced workers. As infrastructure and development projects expand, the need for qualified professionals in construction and related fields remains strong.

The Construction/Carpentry CTE program area gives students foundational skills in carpentry, HVAC, electrical, and plumbing-covering everything from framing to finishing a home. They also gain experience in related trades, preparing them for success in post-secondary education or apprenticeships.

Students can choose to explore welding, where they build expertise in metalwork and fabrication. Topics include four primary welding techniques, cutting and forming of sheet metal, safety, and blueprint reading. Students work on artistic and functional projects and visit multiple local welding companies for real-world exposure.

Students are involved in all phases of on-site construction, gaining hands-on experience from the ground up. This CTE program area is seeing a rise in female participation, reflecting national trends and showcasing how more young women are building the skills and confidence to pursue careers in construction.

Graduates of the Construction/Carpentry CTE program area leave MHS with the skills and readiness to secure wellpaying jobs in the industry. They also develop lifelong skills that will enable them to maintain their own homes in the future.

"There's a sense of pride when you can see something that you personally did and made it your own unique way. Construction/ Carpentry teaches you all the foundations you need to go into the industry."

> - Shatik Medina MHS Student



## CONSTRUCTION/CARPENTRY **EXAMPLE CAREER PATHWAYS**

- Carpentry
- Welding

## STUDENT ORGANIZATIONS

- Technology Student Association (TSA)
- SkillsUSA

### **CORE SKILLS**

- Inspecting Equipment
- Coordination
- Operation and Control of Machines
- Active Listening



Scan the QR code to learn more or visit mhskids.org/CTE.













### **COLLEGE PARTNERSHIPS**

- · Pennsylvania College of Technology
- Thaddeus Stevens College of Technology

### **FUTURE CAREER OPTIONS**

- · High School Diploma:
  - Carpenter
  - Building Inspector
  - Construction Equipment Operator
  - Electrician
  - Plummer
  - Solar Photovoltaic Installer
  - Welder

### · 2-Year Degree:

- Construction Technician
- CAD Drafting Technician
- Site Supervisor/Foreman
- Welding Technician

#### • 4-Year Degree:

- Construction/Project Manager
- Civil Engineer
- Structural Engineer
- Urban Planner
- Architect
- Welding Engineer

# **AUTHENTIC WORK EXPERIENCES**

- Internships:
  - MHS FTS Department
  - HE&R

#### Co-operative Education:

- MHS FTS Department
- HE&R

#### Pre-Apprenticeship:

 Manufacturing through The Manufacturers' Association





Industry-Recognized Certifications