## CONSTRUCTION MANAGEMENT Full Year

## Skilled and Technical Sciences



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**PROGRAM DESCRIPTION:** The Construction Management Program at CTEC is a year-long class where students use concepts of carpentry and construction management to build a house. The course emphasizes carpentry skills, but touches on all aspects of residential construction. This course covers math and other academic skills, but the students are also working in the shop or on the jobsite every day. This is a hands-on, working class.

Students are expected to maintain their own personal tools and equipment, and work every day to complete the project. Along the way, the students will have opportunities to work with professionals in a variety of construction specialties. This class also participates in SkillsUSA, which is a student organization that emphasizes career skills and readiness. Students may also choose to receive concurrent enrollment credit from Salt Lake Community College.



High School Credit: CTE credit or elective credit: Up to 4 credits **Concurrent Enrollment:** Up to 8 college credits. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Skills Certification:** Utah State Skill Certificate Test(s)

Additional Opportunities: Students may experience youth leadership and service through SkillsUSA.

**Requirements:** Physical ability to be able to lift at least 30 lbs. Ability to understand and follow safety procedures. Be able to use power and pneumatic tools safely. Drawing and design skills would be helpful.

Recommended: Woodworking

## **COURSE DESCRIPTIONS:**

**Construction Trades Foundation**: A course that generally prepares individuals in the following areas: basic safety, introduction to blueprint reading, introduction to power tools, introduction to hand tools, and introduction to construction math. It also includes an industry overview, what to expect on the job, and specific career opportunities.

CMGT 1320 Building Construction 1 / Carpentry 1: Students will learn the concepts of footings, foundations and flat work. Green build and traditional techniques will be taught. Students will lay out and construct floors, exterior and interior walls, be introduced to metal stud framing, and hang exterior doors and windows. Students will learn how to install, tape, and mud drywall. Sophisticated methods used to maintain a tight building envelope will be used. Stair and roof construction will be introduced.

CMGT 1330 Interiors Finishes / Carpentry 2: This course covers materials and selection that support the responsible use of natural resources. Subjects include hanging doors, installing base, casing, stair treads, skirts, and closet organizers. Installation of hardwood floors, handrails and stair caps will be taught. Students will also be introduced to the basics of installing tile floors and shower walls. Students will be taught how to install doorknobs and residential hardware.

**Carpentry 2:** An advanced carpentry program with a sequence of courses that prepares individuals to layout, fabricate, erect, install, and repair wooden structures and fixtures using hand and power tools. Includes advanced instruction in common systems of framing, construction materials, estimating, blueprint reading, concrete placing, siding, and mechanical systems. These courses are based on the current National Center for Construction Education and Research (NCCER) task list.

Costs/Fees for the 2024-2025 school year: Pending school board approval.

## Career Possibilities:

Construction
Rough Carpenter
Finish Carpenter
Roofer

Drywall Installer and Finisher

Civil Engineer Structural Engineer Soil Engineer General Contractor Remodeling Contractor Siding Installer

Cement Finisher

Construction Management

Superintendent Project Manager

Architect Draftsman







"This class is amazing! I've learned so much about construction and feel this is a great entrance into actual jobs."

Maddox G

"This class exceeded my expectations! I gained valuable skills in power tool usage and had the opportunity to be part of a hands-on house-building project. Hampton's teaching style is truly inspiring, and I found myself striving for his approval, which motivated me to do my best".

Andrew P

"I really appreciate the lessons I've learned in this class for future jobs in my life. If a career in construction is something you are interested in, I would highly recommend the course."

Joey R

"This class is absolutely amazing! I got to learn how to use lots of machines. You get to meet new people from other schools and have lots of fun building with them. You aren't judged for making a mistake it's a very self-aware class. Hampton makes it a lot of fun, you'll never have a boring day!"

Lvdia S

"The class is super fun. We get to use all sorts of tools and learn different, effective ways of using them. I love how we do hands-on projects instead of laptop work. It really gives you experience or knowledge on what to do."

Marie W

"This class is hands on! You get to get up and do something."

Parker C

"This class is a great learning experience for everyone who wants to get into the construction industry but also for whoever wants to learn about valuable building skills you will need sometime in your life."

Austin L