

CONSTRUCTION MANAGEMENT *Full Year*

Skilled and Technical Sciences



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PROGRAM DESCRIPTION: Students will participate in managing all phases of constructing a home: blueprint reading, estimating proposal, hiring subcontractors, permits application, ordering supplies, math skills, layout work, surveying, zoning requirements, safety procedures, footing and foundation, concrete flatwork, framing, plumbing, electrical, HVAC, finish carpentry, sheetrock, roof coverings, installing windows, installing exterior doors, tile floors, hardwood floors, painting, carpet, hardware. All skills will require proper use of tools involved to complete each process. Students will work with engineers, building officials and licensed trades design consultants. Students will have the opportunity to be involved with SkillsUSA student organization which will help students excel by competing against other students. Students may choose to receive concurrent enrollment credit at SLCC.



High School Credit: CTE credit or elective credit: Up to 4 credits

Concurrent Enrollment: Up to 10 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 Skills Certificate Test

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:

CMGT 1410 Construction Management: Learn how to manage construction sites, materials, sub-contractors and develop essential skills. Students take an active role in research, green build and smart home techniques.

Construction Introduction: 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 1330 Interiors Finishes: 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.

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.

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 2021-2022 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



I really liked the plumbing unit and learning how to solder pipes together. I also enjoyed framing and learning all the different techniques that are used. Learning to do electrical was fun. We learned which wire goes where, how to strip the wires, and how to connect them. This class was great! Larissa Hanley 2021

As a student of the CTEC Construction management program, I was introduced to many new concepts and details about the construction process and industry that I had never considered a possibility before. Some especially interesting construction processes we delved into were masonry, drywall and framing. These parts of the class were fun to learn about and to practice our skills. The program also taps into the specifics of the construction industry where we look at how to manage out time, take bids from different contractors to compare with one another, and consult with the instructor on estimates for our real world projects. We also learn how to construct specific plans and blueprints. Anonymous, 2021

The CTEC Construction Management program has been so fun and very eye opening. Every day I came to class, I learned something new. While taking this class, I feel we have learned aspects of every area in house building. I have learned countless life skills. Brayden Ellis, 2021