



Construction Building Technology

Course Syllabus

Instructor Credentials:

Tim Geiger, Instructor

Associate's Degree – Residential Construction, Delta College
Bachelor's Degree – Technical Education, Ferris State University
Vocational Education Endorsement – Building Trades
Residential Builders License – State of Michigan
Certified Green Professional – NAHB
Member of the Home Builder's Association of the Thumb
Member of the Michigan Construction Teachers Association
SkillsUSA Advisor

Kyle Wagester, Paraprofessional

Associate's Degree – Automotive Service, Delta College
Residential Builders License – State of Michigan
20 years' experience in Residential and Commercial Construction
Member of the Michigan Construction Teachers Association
SkillsUSA Advisor

Course Description:

This program provides the student with the opportunity to develop manipulative skills, math skills and work habit skills required to be successful in the residential construction. The CBT program curriculum includes but is not limited to rough framing, roofing, window and door installation, siding, drywall hanging and finishing, painting, finish carpentry, cabinetmaking, laminating, wood and tile flooring, masonry, and plumbing. This program provides on-site training during the construction of an on-site residential dwelling. CBT offers an introduction to equipment operation using our Backhoe Simulator. Completers are well prepared for placement on a construction site or to pursue further training at a two or four-year college in areas from Residential Construction to Construction Management.

Upon completion of this course students will be able to:

- Enter directly into the workforce
- Begin an Apprenticeship program
- Continue your Education at a trade school or college

Required Materials/Dress:

All students will need to complete an online OSHA Safety training to fully participate in Construction activities. Students are required to wear PPE (personal protective equipment); safety glasses, hard hats, safety or steel toe shoes at all times in the shop and on site area. A \$75 lab fee is collected from each student to offset costs of PPE and some hand tools which

they get to keep upon completion of the course. PPE also includes jeans (NO shorts, skirts, or dresses), shirts need to be tucked in (NOT long, loose, or baggy), jewelry needs to be kept under clothing or removed, and hair needs to be pulled back or trimmed not to interfere with vision.

Course Segments:

This program is designed around 12 segments and many standards. Standards are individual tasks that the student will learn within a segment. A concentrator will complete at least seven of the 12 segments, a completer will complete all 12.

Segment 1 Safety, Health, and Environmental

Segment 2 Industry Overview

Segment 3 Employability and Technology Skills

Segment 4 Construction Materials

Segment 5 Construction Tools and Equipment

Segment 6 Building Construction Design, Blueprints, etc.

Segment 7 Site Preparation and Infrastructure

Segment 8 Common Construction Practices and Concepts

Segment 9 Residential Construction Techniques

Segment 10 Green Technology Construction Techniques

Segment 11 Heavy Equipment and Civil Construction Techniques

Segment 12 Construction Business Management

Grading Criteria

Based on the HATC Student Handbook, the grading criteria is broken into two areas: academic performance (60%) and daily work ethic (40%).

<u>Academic Standard (60%)</u>	<u>Work Ethic Standard (40%)</u>
60% of the grades is based on academic performance from skills such as:	40% of the grade is based on daily work ethic in the following:
Hands on task Technical reading Quizzes Tests Journals Etc.	Attendance / Punctuality Personal Management Positive Attitude Initiative / Effort Cooperation Time Management Safety Practices Following Directions

Guidelines for Success:

1. Safety glasses, hard hats, and other PPE will be worn in the shop and on the worksite.
2. Be “work ready” on time.
3. Electronics/devices are not allowed during class time.
4. Clean up after yourself.
5. Use professional/appropriate language
6. Use tools the way they were intended to be used.

Articulation:

Articulation agreements are made between colleges and the HATC, which allows students to receive college credit at an institution for completing the HATC program. Currently agreements are in place for this program with Delta College and MC3 Apprenticeships.

Available Credentials:

- OSHA 10 Hour Certificate
- 60 Hour Pre-Licensure Certificate
- MC3 Completion Certificate
- Backhoe Simulator Certificate
- Rough Terrain Forklift Certificate

Online Delivery:

- Google Classroom
- iCEV

Work-Based Learning:

Work-Based Learning is available for students through Job Shadow and On the Job training (OJT). Job Shadow is a short term experience for students to shadow a professional to gain information about a potential job. OJT is reserved for second year students who can work for an employer for purposes of training and experience part of the week and in the classroom the remaining portion.

Safety Training:

Safety is very important! Students will sign a Safety Pledge Agreement and review it several times throughout the year. All students must complete an online 10 Hour OSHA training program. Students will take written safety quizzes and demonstrate safe use of hand and power tools before they are permitted to use them.

Student Leadership:

Leadership opportunities are offered through HATC Student Leadership Team and SkillsUSA. SkillsUSA is a Career Technical Student Organization that offers employability skills and leadership training. Students can also participate in competitions ranging from their career field skills to their leadership skills.

Resources: