



WILLIAM D. FORD CAREER-TECHNICAL CENTER

CAREER • TECH

36455 Marquette St., Westland, MI 48185 Construction Technology 2

2025-2026

CIP Code: 46.000, PSN: 14204

Instructor: Aaron L. Bryant

Teacher Assistants: Rob Wysong

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Prerequisites:

Completion of Construction Technology 1 with a B or better Course Code: *YR2 V0620

**Note: C or better if recommended by Construction Technology 1 instructor*

Credit:

This class is valued as 3.0 credits over the course of one year. Successful completion of this CTE program may have credits counted as any of the following:

- Senior year math-related credit
- Visual, performing and applied arts credit requirement

Required Textbook:

Title: Residential Construction Academy: Carpentry, 2nd Edition by Floyd Vogt (2008) Title:

Carpentry and Building Construction by McGraw-Hill (2016)

Supplemental Materials:

Students are required to supply their own work boots (preferably steel toe) Students in this course are not responsible for supplying their own tools:

Tool belt, Framing Hammer, Cats Paw, Speed Square, Tape Measure, Utility Knife, Chalk line safety glasses are all provided. All supplemental Materials are required in this course every day, student refusal may result in dismissal from the Construction Technology 2 program.

Online Instruction:Google Classroom

- Assigned observation papers will be linked to Google Classroom

**Note: Subwork will be assigned in Google Classroom*

Standards-based Grading Scale:

Site/ Lab Work Standards:

These points are based on how a student performs and meets standards during class projects.

4- Assertive, shows initiative, shows understanding of project, good quality of work

3- Follow directions, has good understanding of project, good quality of work

2- Follow directions, fair quality of work

1- Does not follow directions, poor quality of work

0- No Attempt/ not present

Grading Outline:

10% Attendance (percentage of days present out of days scheduled)

60% Site/ Lab Work

30% Tests/Quizzes

**Employability= (attendance & site work combined =70%)*

Grade Distribution:

90% or higher = A

80-89% = B

70-79% = C

60-69% = D

59 or below% = E

What We Do:

In this course, students will actually be completing the finishing interior work at the student home built from the previous semester.

**Note: For the second semester for the 2025-2026 Construction Technology 2 class there will be other projects within the district around the city after the completion of the student home build.*

A Day in the Life:

This is not an in-class course, students will arrive at William D. Ford and then get on a bus to go to the job site. It is very important to be on time and ready for the bus when it arrives. If a student misses the bus they **WILL** be sent to the office and sent home or back to their home school. Students will be required to lift more than 50 pounds at given times.

- Boots, tool belt, safety glasses, and all other course materials are ready when the bus arrives (5-10 minutes after the bell)
- Arrive on site and set up for the day
- A recap on the day before and what we will be doing that day
- Work on the house and clean up before the bus arrives back at the site

Student Leadership:

All students will apply their knowledge and leadership skills through classroom competitions. The goal of these competitions is for students to develop workplace competencies, such as teamwork, leadership, communication, critical thinking, and academic proficiency that are aligned with industry standards and expectations. Leadership skills are fostered by encouraging students to develop and participate in the planning and decision-making. Students may also participate in individual contests with other Career Tech Centers and post-secondary institutions.

Resume':

All Construction Tech 2 students will be required to have/make a resume.

Student Credentials/Certification:

As suggested by the Construction Industry, students will have the opportunity to take OSHA-30 in their second year in the program. Students will also receive a 60-Hour Builder's Per-license for qualifying students. For students to be eligible to receive a 60-Hour Building Pre-license will have to meet the following requirements:

- Have a B or higher throughout the year
- Do not miss more than 20 days throughout the school year. This includes suspensions, but not school-related absences.
- Pass the practice test with an 80% or higher

Employability:

Attendance is critical to success in this class. Students will be held to the standard of an industry employee. Homes and industries are built on teamwork, and when an employee fails to show up for work, they directly affect the productivity of the team and task at hand. Students are expected to be in class before class starts at 7:25 A.M. and 11:25 A.M. This is very important because a bus is taken to our site every day. If a student misses the bus they **WILL** be sent to the office and sent home or back to their home school.

**Note: School transportation issues will be considered to be exceptions.*

Students must arrive on-site via school transportation:

If absent, students will not receive full credit for employability expectations. Students are graded on building a house as well as on site projects, if a student is not here they will be graded accordingly.

Behavior:

If a student displays **ANY** unsafe behavior of any kind i.e. horse play, wearing headphones, hitting or touching other students, unsafe ladder practices, refusal to use required safety equipment, screaming unnecessarily, repeated wearing of improper work clothes, running, throwing things of any kind at anything for any reason in the direction of another student, failure to hold power tools safely. The student/ students involved WILL be removed at the discretion of the teacher and William D. Ford administration.

**Note: It is paramount that students are alert and aware of their surroundings while on site at all times. At William D. Ford we can not express the emphasis we place on a safe environment while on site for everyone involved both students and teachers therefore this is a zero tolerance policy.*

Work-Based Learning:

Work-based learning is a valuable experience in which every student in Career and Technical Education is required to participate. All students will be given opportunities to attend a minimum of one field experience each school year. Those students who do not attend the scheduled experience(s) will be required to find a site related to that experience.

Students will also be encouraged to find a job in the field of their interest where they can spend up to 4 days a week on said job working or learning (this can be paid or unpaid).

The student will be required to get the teacher's signed permission, and the parent/guardian's signed permission, fill out a training agreement to be signed by the site supervisor and provide their own transportation to and from the site. Upon completion of the field experience, the student will turn in a question and answer assignment provided by the teacher regarding the experience

Tests, Quizzes, and Course Work:

*If absent on the day of a test, you are required to take the test the following day. You are responsible for asking the teacher for the test when you return. *Deadlines are important in Construction.

Extra Help/ Accommodations:

The instructor will be available for extra help. Feel free to schedule a time that's convenient for both you and your instructor. Test/Quizzes may be read aloud and extended time may be permitted under certain circumstances. Seating arrangements may be adjusted based on student needs.

Standards:

- Safety
 - Review OSHA and Job site procedures
- Foundation
 - Students will be able to identify parts of a foundation and explain the process of constructing.
- Floor Framing
 - Students will be able to interpret blueprints to layout and install the entire floor system.
- Wall Framing
 - Students will be able to interpret blueprints to layout and install interior and exterior walls.
- Roof Framing
 - Students will be able to interpret the truss layout and install the entire truss package.
 - Students will be able to demonstrate safe elevated work practices.
- Shingle Installation
 - Students will be able to install architectural shingles on a roof system, utilizing ice guard, tar paper, ridge vent, step flashing, and valley flashing
- Insulation
 - Students will be able to insulate a home to meet current codes.
 - Students will be able to blow insulation into an attic space to increase R-Value to the current code.
- Drywall
 - Students will be able to hang drywall on walls and ceilings.
- Trim/Flooring
 - Students will be able to hang and trim a pre-hung door, bi-fold door, and pocket door.
 - Students will be able to install baseboard moldings, window sills, aprons, and casing.
 - Students will be able to install kitchen and bath cabinets.
- Paint
 - Students will be able to operate an airless sprayer to spray and backroll walls and ceilings.
 - Students will be able to identify the differences in paint types and sheens.
- Siding
 - Students will be able to install vinyl siding and accessories.

Competencies Covered:

- Segment Z
 - The second year of this program is devoted entirely to segment Z. During this time the students will build an entire home from the ground up. The project is completed in partnership with the City of Westland Community Development Department.

Post-Secondary Articulated Credit:

Students **may** be eligible to receive free college credit for successful completion of the Construction class. This course has articulated credit agreements with Baker College, Davenport University, Ferris State University, Schoolcraft College, Washtenaw Community College and Wayne County Community College. Additional agreements may exist upon request with the advisor at the incoming institution.

Student and Parent Acknowledgement

Attendance-Daily attendance is critical as your work and employability can not be measured if you aren't here. Grades are taken by participation in building the house and a student will not get a favorable grade in the class if they are not here. Students are responsible for asking the instructor what they missed for the days they were absent.

NOTE: Work on the job site can not be redone.

Technology-Students will be on an actual job site where dangers are present at all times and therefore full attention to safety must be given at all times. Cell phones or earbuds are not allowed out during the building process of the house.

Disciplinary Actions-Safety is the number one priority in this course. Students will be removed from the class and not receive credit if they are not following the safety rules or procedures for the job site.

Food-Students are not allowed to eat outside food in any classroom at William D. Ford, including the Construction classroom. Students have time before the bell to eat food in the Commons area.

Driving-Students coming from different schools will have the option to apply for a driving pass if they would like to drive to William D. Ford (Wayne students will have to ride the bus provided for them).

With this pass students **CAN NOT**:

- Drive other students to school
- Deliver food for students
- Be tardy more than 5 times

If students cannot follow these rules then their driving pass will be revoked and will have to ride the bus to and from William D. Ford

I have read and understand the classroom policies for the Construction Technology 2 class.

Please sign and date below and return to the instructor.

Student Name Printed _____

Student Signature _____

Date _____

Parent Signature _____

Date _____