# **CHIPPEWA VALLEY SCHOOLS**

# Career and Technical Education







# **CONSTRUCTION TRADES**

Construction Trades is a one or two—year program providing basic and advanced instruction in all areas of residential construction. The majority of training is hands on in the Dakota High School Construction Lab. The instructional objective is to provide the students with core competencies in residential construction, preparing them for entry into post—secondary construction management, Carpentry Apprenticeship Programs, and entry—level work in construction trades. A second (production) objective is to complete a single—family pre—manufactured (modular) home, which is utilized by Habitat for Humanity upon completion. To develop leadership skills, students will also be involved in several student organizations, such as SkillsUSA, MITES and BIA Student Chapter. The program of study in Construction Trades is part of the National Career Cluster called, Architecture and Construction.

## **Examples of Careers:**

- Architectural Design
- Brick Layer
- Carpenter
- Carpet Installer
- Cement
- Cement Layer
- Construction Manager
- Construction Supervisor
- Construction Worker
- Electrician
- Finish Carpenter
- Finisher
- Floor Installer
- Heavy Equipment Operator
- Insulator
- Iron Worker
- Laborer

- Mason Worker
- Millwright
- Pipe Fitter
- Plumber
- Sales
- Tile Installer
- Window Glazer / Installer

# Examples of Degrees, Certificates and/or Certifications

- Bachelor of Education
  - Career Technical Education
- Construction Management
- Structural Engineer
- Civil Engineer
- Construction Applications
- Trade Schools
- Apprenticeship

Chippewa Valley Schools partners with Macomb County Habitat for Humanity. This unique partnership enables Construction Trades to provide much of the labor for the house while simultaneously meeting curriculum objectives. By serving a larger humanitarian purpose, students also learn more than just technical skills.



### Classes can meet the following graduation requirements:

Visual and Performing Arts Credit

World Language Credit

Senior Math–Related Credit

# **Articulation — Earn College Credits**

Students successfully completing the CTE State-approved program may be eligible for tuition free credit.

### **Instructor:**

Mr. Tim Wells <a href="mailto:twells@cvs.k12.mi.us">twells@cvs.k12.mi.us</a> 586.723.2880





NOTICE OF NONDISCRIMINATION It is the policy of Chippewa Valley Schools not to discriminate on the basis of race, color, religion, national origin or ancestry, gender, age, disability, height, weight or marital status in its programs, services, activities, or employment. Inquiries related to nondiscrimination policies should be directed to: Civil Rights Coordinator, Assistant Superintendent of Human Resources, Chippewa Valley Schools Administration, 19120 Cass Avenue, Clinton Township, MI 48038 Phone: 586–723–2090 / Nondiscrimination inquiries related to disability should be directed to: Section 504 Coordinator, Director of Special Services, (same address) Phone: 586–723–2180

#### **EXAMPLES OF CAREERS:**

- Architectural Design
- Brick Layer
- Carpenter
- · Carpet Installer
- Cement
- · Cement Layer
- Construction Manager
- Construction Supervisor
- Construction Worker
- Electrician
- Finish Carpenter
- Finisher
- Floor Installer
- Heavy Equipment Operator
- Insulator
- Iron Worker
- Laborer
- Mason Worker
- Millwright
- Pipe Fitter
- Plumber
- Sales
- Tile Installer
- Window Glazer
- Window Installer



# EXAMPLES OF DEGREES, CERTIFICATES AND/OR CERTIFICATIONS

- Bachelor of Education (Industrial Ed)
  - Career Technical Education
- Construction Management
- Structural Engineer
- Civil Engineer
- Construction Applications
- Trade Schools
- Apprenticeship



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# CONSTRUCTION TRADES





INSTRUCTOR:
DAKOTA HIGH SCHOOL
Mr. Tim Lewis
shager@cvs.k12.mi.us
586.723.2880

DON'T JUST CHOOSE A CLASS ~ CHOOSE A CAREER

#### CONSTRUCTION TRADES

Construction Trades is a one-year program providing basic and advanced instruction in all areas of residential construction. Most of the training is hands-on in the Dakota High School Construction Lab. The instructional objective is to provide the students with core competencies in residential construction, preparing them for entry into post-secondary construction management, construction apprenticeship programs, and entry-level work in construction trades. To develop leadership skills, students will also be involved in student organizations such as SkillsUSA and MITES.



### CLASSES CAN MEET THE FOLLOWING **GRADUATION REQUIREMENTS:**

- Visual and Performing Arts Credit
  - World Language Credit
- Articulation Earn College Credits Students successfully completing CTE state approved classes, may be eligible for tuition free credit.

## 9121/9122 CONSTRUCTION TRADES 1A/1B

**Grade 9–12** 

2 hour 1.0/1.0 credit Prerequisite: None.

Class meets for two hours daily in the Construction Lab at Dakota High School. Students will gain proficiency in correct, safe usage of hand, stationary and portable power tools commonly associated with residential construction. Students will also learn correct construction terms; basic construction concepts; materials usage, estimating and measurement. They will be instructed in the fundamentals of residential construction systems such as foundations, framing, window/door installation, roofing, siding, masonry, plumbing, and electrical wiring. This course has been approved to meet the MMC senior year math-related credit requirement.

#### 9125/9126 CONSTRUCTION TRADES 2A/2B Grade 10-12

2 hour 1.0/1.0 credit

Prerequisite/Recommendation: Construction Trades 1A/1B with a 2.0 or higher and teacher/administrative recommendation.

Class meets for two hours daily at the Dakota High School Construction Lab. Students will apply and further develop skills learned in Construction Trades 1 through extensive hands-on experience as they work to complete a full-scale home. Students will work in a production environment in which they will learn the importance of effective teamwork to meet production schedules, to stay within project budget and to deliver a product, which meets specific quality objectives. Personal management skills necessary for success in the construction trades will be stressed. Additional topics taught in the Construction Trades class include employability skills, green technology construction techniques, exposure to heavy equipment/civil construction techniques, and construction business management.

This course has been approved to meet the MMC senior year math-related credit requirement.

### 9344/9345 CONSTRUCTION TRADES 3A/3B BC

2 hour 1.0/1.0 credit

Grade 12

Prerequisite/Recommendation: Construction Trades 2A BC/2B BC with a 2.0 or higher and teacher/ administrative recommendation.

This course will provide additional hands-on experience in the field of Construction based on skills learned in Construction 2. Students will be expected to be a leader on the job, and to be assigned Project Manager duties with descriptions from the instructor including material list break down, cost break down of list, labor estimating, scheduling, MITES completion involvement, and Michigan Building Code. Students will work in a production environment to learn the importance of effective teamwork to meet production schedules, stay within project budget and deliver a modular home, which meets specific quality objectives. Employability skills necessary for success in the Construction Trades will be stressed. This course has been approved to meet the MMC senior year math-related credit requirement.

#### 9035/9036 CONSTRUCTION TRADES INTERNSHIP 1/2 9037/9038 CONSTRUCTION TRADES INTERNSHIP 1A/1B

2 hour 1 hour

Prerequisite: Construction Trades 1A/1B and concurrently enrolled in Construction Trades 2A/2B OR 3A/3B BC. This course may be taken for one or two hours. An Individual Educational Training Plan and Training Agreement are developed for each student-trainee detailing his/her specific learning activities. Note: A student who chooses the Internship course for either one or two hours is expected to work 10 hours per week and provide their own transportation.