

# Construction Foundations

17-410-1 | Technical Certificate | 7.45 Credits

**Campus:** Contact your regional Northwood Tech customized training representative to discuss location needs

## Program Overview

The Construction Foundations certificate will provide students with the basic knowledge and skills necessary for entry level job success in the construction field. Students will learn the basic fundamentals of construction framing and drafting along with print reading and math applications related to construction. Safety principles and the use of hand and power tools will be covered.

## Special Features

Northwood Tech's Construction Foundations program is designed to offer at off campus sites. This mobile delivery option increases training opportunities for high schools and other Northwood Tech partnering agencies.

## Inquire

For more information, please email Customized Training at Northwood Tech: [customizedtraining@northwoodtech.edu](mailto:customizedtraining@northwoodtech.edu)

## Program Outcomes

Upon completion of this certificate, completers will be able to:

- Use hand and power tools and equipment
- Apply industry recognized safety practices and procedures
- Interpret construction drawings
- Demonstrate industry building practices and material application

## Career Outlook

Typical positions available after completion include:

- Construction Worker
- Construction/Carpenter Laborer
- Carpenter Assistant
- Carpentry Framer

## Related Programs

- Construction Essentials
- Construction and Cabinetmaking

## Required Courses

Number	Course Title	Credits (cr.)
32410303	Construction Framing 1*	4 cr.
32410339	Print Reading for Building Construction	2 cr.
32804330	Math for the Trades	1 cr.
47449426	OSHA Safety: Construction - 10 hr	.25 cr.
47531419	CPR/AED/Basic First Aid-ASHI	<u>.20 cr.</u>

**TOTAL CREDITS** **7.45 cr.**

\* Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

## Course Descriptions

### 32410303

#### Construction Framing 1 - Credits: 4

This is a lab/shop applications course covers the operations required in building layout, installation of concrete and masonry, and the framing of floors and walls to meet Wisconsin State Code. Competencies are learned through actual hands-on applications. COREQUISITES: 32410339 Print Reading for Building Construction and 32804355 Math 355.

### 32410339

#### Print Reading for Building Construction - Credits: 2

This course provides instruction in reading and interpreting shop drawings, residential drawings, and commercial building plans. Emphasis is placed on building terminology and learning conventional techniques of communicating building methods from the designer to the builder. Students learn to visualize the structure and to interpret elevations, plan views, details, and sections from drawings. They also learn to read and interpret building specifications.

### 47449426

#### OSHA Safety: Construction - 10 hr - Credits: .75

Course includes introduction to OSHA standards, electrical, fall protection, excavations, tools, personal protective equipment, materials handling and storage, welding and cutting, fire protection and hazard communications.

### 47531419

#### CRP/AED/Basic First Aid-ASHI - Credits: .20

This course is a combined CPR/AED & Basic first aid program designed specifically for laypeople. The program is good for the community and the workplace setting. This course is designed to teach people the knowledge and skills that they need to recognize emergencies and perform CPR and use an AED and perform first aid until EMS arrives. This course will certify a person for 2 years in CPR/AED/Basic First Aid.

### 32804330

#### Math for the Trades - Credits: 1

This course will include extensive applications in the trades using these topics: calculating using whole numbers, fractions, and decimals; converting between English and metric systems; solving proportions and percentage problems; applying algebraic formulas and equations; and calculating perimeters and areas.