

Workforce Training and Development

Construction Courses

The multi-billion dollar construction industry is one of the largest employers and most important segments of our nation's economy. Wentworth's Continuing Education Unit courses have proven beneficial to thousands of students and businesses throughout the New England area.

These courses are designed to serve both the novice who wishes to acquire basic construction skills as well as the skilled tradesperson who wants to advance within the industry. This broad selection of courses enables students to choose a program which will best suit their particular career or personal needs.

TCON200 PLAN READING

Fundamentals of plan reading including symbols, dimension, and structural details with emphasis on architectural, structural, and site plans for building construction projects.

TCON201 ESTIMATING

Fundamentals of preparing a detailed cost estimate including performing material quantity takeoffs, pricing labor and equipment and evaluating overhead costs. Emphasis will be placed on wood, masonry and sitecast concrete. **Prerequisite:** *TCON200 Plan Reading or equivalent experience.*

TCON202 WOOD FRAMING

This course is designed to familiarize the student with the most common methods of wood framing, including rough building layouts of floor, wall, and roof systems.

TCON203 MASONRY

Students receive practical instruction in the fundamentals of masonry, including the use of masonry tools and materials. Cements, mortars, different bonds, estimating, flashing and washing masonry are discussed. Brick walls, arches, and pilasters are built by the students in the laboratory. Concrete blocks are also covered by lecture and laboratory practice.

TCON205 ROOF FRAMING

This course covers the layout of all rafters involved in the makeup of simple and complex even-pitched roofs. Class time is spent both in lecture and lab where students lay out the full-size rafters. Instruction is given in the steel square and mathematical layout of all rafters. Other areas of discussion may include: dormers, cornice, and special roof-framing situations.

TCON206 BASIC SURVEYING

The basics of construction layout including use of the automatic level, laser level, and theodolite to establish line and grade. Discussion will focus on applications of these instruments to cut and fill operations, the installation of pipelines, and plumbing and aligning formwork. Exercises are designed to allow students time to practice on the equipment.

TCON208 STAIR BUILDING

Instruction is given in hand tools and woodworking machinery. Students layout and build stairs of various designs in a reduced scale. Topics include: terminology, stair design, calculations for risers and well openings, and the parts of the finished stair case. Special emphasis is given to the stair building practices of finish carpentry.

TCON209 THE UNEQUAL PITCH ROOF

This course covers framing the unequal pitch roof. This type of roof framing is considered to be one of the more complex and difficult areas of carpentry. This course will focus on a combination of the graphical and mathematical method for determining the lengths and cuts of the rafters. Instruction will include constructing segments of an unequal pitch roof.

Prerequisite: *TCON205 Roof Framing*

Each Course

Length: 6 weeks

2 class meetings per week

Time: 6:00p.m. – 8:30p.m.

CEU's 3.5 per/course

Cost: \$655.00

TCON150 OSHA-10 Hour

This course provides entry-level construction workers general awareness on recognizing and preventing hazards on a construction site. OSHA recommends this training as an orientation to occupational safety and health. Construction topics include concentration on the OSHA Focus Four Hazards:

1. Fall Protection (e.g. floors, platforms, roofs);
2. Electrical Hazards
3. Struck by (e.g. falling objects, trucks, cranes);
4. Caught in-Between (e.g. trench hazards, equipment.)

Length: 2 weeks

2 class meeting per week/2 Saturdays

CEU's 1 per/course

Cost: \$300.00