Piledriver Course Descriptions

Orientation / Safety
Piles & Hammers
Hardware Procedures
Abutments
Falsework
Bridge Deck Forms
Welding Fabrication
Structural Welding AWS

ORIENTATION / SAFETY (80 Hours)

This course is designed to give the students the information on using and operating hand and power tools that are specific to the Pile Driving industry. Union history and benefits are explained, along with trade orientation. Certifications in First Aid/CPR, Forklift, powder actuated tools, scaffold user and OSHA 10 can be obtained.

PILES & HAMMERS (80 Hours)

This course provides an overview of the types of piles used in construction as load bearing support for commercial buildings, bridges and piers when ground stratum is insufficient in strength. The methods, techniques, and pile hammers utilized in the installation process will be presented. Students will use the proper procedures to install two wood sheet pile systems.

HARDWARE PROCEDURES (80 Hours)

This course is an introduction to the proper use of rigging hardware, safe rigging practices, calculations, and inspection techniques specific to working with pile and rigging equipment. Procedures for various rigging techniques including hand rigging with crane assist, crane hoisting, hand signaling and general jobsite safety requirements are emphasized. UBC Rigging qualification certifications will be distributed upon successful completion of this course.

ABUTMENTS (80 Hours)

This course provides instruction in the detailing, layout and construction of abutments used in the heavy highway industry. The terms, components, materials, building techniques and procedures will be presented. The class project includes keyway, panel, head wall and wing wall construction.

FALSEWORK (80 Hours)

This course presents the basic installation techniques and procedures used to install a typical structure support system for concrete formwork. Falsework components, materials, and site preparation will be discussed. Students will complete a project that includes deck form construction to facilitate the falsework support system installation. Related safety, math and print reading will also be covered.

BRIDGE DECK FORMS (80 Hours)

This course provides students with an overview of basic bridge and deck construction. Descriptions for exterior and interior girders; edge forms; bulkheads; hinge and deck forms will be presented. Formwork project will include panel construction, assembly, and hardware installation tasks. Related safety, math and print reading will be covered in the training.

WELDING FABRICATION (80 Hours)

This course is designed as an introduction to layout and fabrication. The students will be introduced to the basic skills of measuring, torch set-up and cutting, shaping, grinding, welding, filing, heating and bending of metal parts. As well as the safe and proper use of all necessary hand and power tools.

STRUCTURAL WELDING AWS (80 Hours)

This course is designed to prepare the student to obtain an AWS structural welding certificate per AWS D1.1 Structural Welding Code, the welding of plates that are 1/8" to unlimited thickness. Students must obtain AWS certification to receive credit for class.