

General Carpentry Course Descriptions

Orientation
Safety & Health Certifications
Basic Wall Framing
Printreading
Foundations and Flatwork
Basic Commercial Framing
Cabinet Installation
Wall Forming
Commercial Floor Framing
Moldings & Trim
Rigging
Stairs & Ramp Forming
Basic Roof Framing
Doors / Door Hardware
Transit Level / Laser
Advanced Printreading

ORIENTATION **(40 Hours)**

This course provides an overview of the carpentry profession, tools of the trade, and jobsite safety. Discussion topics will include the history of the trade, apprenticeship responsibilities, and hiring-hall practices, and measurements. Successful students will receive OSHA 10 and Powder Actuated Tool certification cards. Qualified candidates will be issued an UBC gradall operator's card.

SAFETY & HEALTH CERTIFICATIONS **(40 Hours)**

This course covers the safe and appropriate use of scaffolds, aerial lift equipment, and emergency response procedures. Successful students will receive UBC Scaffold Erector and Aerial Lift Operator qualification cards. First Aid and CPR certification will be issued upon successful completion of the American Red Cross training provided.

BASIC WALL FRAMING **(40 Hours)**

This course presents the theory, methods, and procedures required to frame basic walls. Hands-on practice using proper tool techniques and appropriate materials will enhance fundamental skill development. Beginning with an introduction to print reading, students will perform: basic wall layout; plating procedures; framing assembly and bracing; before aligning and completing selected wall construction project to industry standards.

PRINTREADING **(40 Hours)**

This course introduces the basic principles and conventions associated with architectural print interpretation. Print characteristics, drawing methods, and standard graphic representations are explained and thoroughly discussed. Students will review plans and apply the visualization techniques presented in the training.

FOUNDATIONS & FLATWORK (40 Hours)

This course covers the design and function of several types of foundations and concrete flatwork. The methods, techniques and procedures for formwork layout, elevation, and construction will be presented. Jobsite safety, print interpretation, material identification, and basic use of the builders' level will be included in the training. Students will construct three selected formwork projects.

BASIC COMMERCIAL FRAMING (40 Hours)

This course provides an introduction to basic wall framing theory and construction techniques. Floor plan interpretation will be used for job planning, design recognition, and to determine materials. Students will layout and detail wall plates for locating basic wall components and door openings. Instruction will include measuring skills, mathematical principles, wall assembly and installation procedures, and detail how structural connections are made.

CABINET INSTALLATION (40 Hours)

This comprehensive course covers cabinet installation from establishing the design layout to attaching countertops. An emphasis will be placed on print interpretation, job planning and proper installation sequence. Students will use the methods and procedures presented to install typical upper and lower cabinetry units and countertops.

WALL FORMING (40 Hours)

This course provides forming methods for reinforced concrete walls. Blueprint reading, estimating, and introduction to form design, hands-on training in single and double-waler forming systems is included.

COMMERCIAL FLOOR FRAMING (40 Hours)

This course covers floor joist construction and the various installation techniques used within the commercial industry. Students will interpret floor plans for job planning, interpretation of the applicable floor joist system and to calculate material take offs. Integration of wall plating, joist layout and floor sheathing methods will be included. Instruction will incorporate measuring skills, use of mathematical principles, specialty hardware identification and applicable building codes.

MOLDINGS & TRIM (40 Hours)

This course covers how moldings and trims are utilized to finish exterior and interior construction design features. Product styles, characteristics, applications, and installation methods are included in the discussions. The tools techniques for cutting, coping and installing various molding and trim types are presented and practiced throughout the training.

RIGGING (40 Hours)

This course presents both lifting theory and practical rigging methods and procedures. The design, characteristics and safety working load of lifting hardware will be discussed. Rigging attachment procedures, lifting equipment, limits of operation and communication practices will be covered. Successful students will receive UBC rigging qualification cards

STAIRS & RAMP FORMING (40 Hours)

This course provides the students with the methods, procedures and practices used to form stair and ramp structures. State and Federal building codes pertaining to stairs and ramps will be covered in this class.

BASIC ROOF FRAMING **(40 Hours)**

This course provides an introduction to basic gable roof framing, terminology and construction characteristics. Students will interpret print views and drawing elevations for job planning, and to determine rafter systems and layout details. Basic rise, run, rafter angles and length calculations will be practiced. Framed wall construction will be incorporate to facilitate the gable roof assembly techniques and installation procedures that are the focus of this training.

DOORS / DOOR HARDWARE **(40 Hours)**

This course covers the installation process for several types of security and exit door hardware. Discussion of electrical and card reader systems will be included. An emphasis will be placed on print interpretation, door schedules, symbols, and hardware recognition. Students will use the methods and procedures presented to install selected door and hardware systems.

TRANSIT LEVEL / LASER **(40 Hours)**

This course covers the terminology, optical principles, and operating procedures for the transit and laser levels. The conventional methods for measuring angles, using degrees, minutes, and seconds on vernier scales will be included in the transit portion of this class. Students will set up levels, determine benchmarks, take and record elevation readings.

ADVANCED PRINTREADING **(40 Hours)**

In this course, students will analyze multi-view drawings to determine construction type, locate benchmark, find building element, references, and perform calculations for construction purposes. The training will include sketching, material take-off, labor estimation, and the methods used to interpret schedules and specifications.