Construction & Building

CB101 Carpentry 1

Cr-4

This course introduces description and use of construction materials, tools, safety procedures, and framing techniques for foundations, floors and walls. Hands-on experience and safety are emphasized.

CB102 Carpentry 2

Cr-4

This course covers the design and construction of residential roofs, including rafters, trusses, hands-on experience and safety procedures are emphasized. Prerequisite: CB101 Carpentry 1.

CB103 Carpentry 3

Cr-4

This course covers the finishing of the interior and exterior of a residential structure. Topics include windows and skylights, interior and exterior doors, frames and walls, thermal barriers, and sound insulation, stairs, and plaster, and drywall Hands-on experience and safety procedures are emphasized. Prerequisite: CB101 Carpentry 1.

CB104 Basic Woodworking

Cr-F

This course covers the practical aspects of basic woodworking in a shop. Topics include the use of table saws, planers, jointers, band saws, and lathes; design, layout, and construction of cabinets and countertops. Hands-on experience and safety procedures are emphasized.

CB121 Masonry 1

Cr-4

This course introduces the fundamental concepts of concrete construction. Topics include theory of concrete design, construction methods and materials, tools, foundations, walls, and flat work. Handson experience and safety procedures are emphasized.

CB122 Masonry 2

Cr-4

This course introduces the fundamental concepts of block masonry construction. Topics include the history, development, and manufacturing of mortar and block, mixing mortar, laying block, and the use and care of tools and scaffolding. Hands-on experience and safety procedures are emphasized.

CB123 Masonry 3

Cr-4

This course introduces the fundamental concepts of brick masonry construction. Topics include the history, development, and manufacturing of brick, mixing mortar, bonding, corners, laying brick masonry for fireplaces, chimneys and arches, and the use and care of tools and scaffolding. Hands-on experience and safety procedures are emphasized.

CB126 Blueprint Reading (Construction Trades)

Cr-3

This course provides an introduction to architectural working drawings. Topics include background principles, residential working drawings, specifications, and reading the working drawing of a small structure.

CB131 Construction Estimating

Cr-3

This course covers the organization of a formal estimate for a residential building and the types of estimates used in construction, along with qualifications of an estimator. Each division is broken down for a thorough understanding of the materials and methods used to calculate proper quantities. Actual working drawings and specifications for a small residence are used to compile a systematic estimate of materials and labor. Excavation, concrete work,masonry, and wood and structural steel construction are covered. Topics include builders estimates, quantity take-off process, quantity determination, cost estimating from quantities, cost control system, contracts, bonds and

insurance, overhead and contingency issues, and computer-assisted estimating.

CB301 Industrial Practicum

Cr-3

This course allows for the enhancement of academic skills by gaining work-related experience. Students arrange for the practicum, which must conform to Center guidelines.