

# SUBJECTS AND COURSES

## COURSE DESCRIPTIONS - BUILDING CONSTRUCTION (BUC)

### BUC 110 Basic Construct Tools & Materi

This course emphasizes the tools and materials used in the construction industry. Topics include safety, hand tools, hand held power tools and construction materials. Upon completion, students should be able to work safely within the industry and operate various hand tools and power equipment. **4 Credit Hours**

### BUC 112 Construction Measurement Calc

PREREQUISITE: As determined by college COREQUISITE: As determined by college NOTE: There is an approved standardized plan-of-instruction for this course. This course focuses on the mathematics and calculations used in building construction. Topics include direct and computed measurements and practical applications of mathematical formulas. Upon completion, students should be able to apply measurement and mathematical formulas used in building construction. **3 Credit Hours**

### BUC 113 Basic Construction Print Rdg

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. NOTE: There is an approved standardized plan-of-instruction for this course. This course introduces students to construction print reading. Topics include symbols and abbreviations, basic plans, elevations, sections and details. Upon completion, students should be able to read basic construction plans and trade information for major crafts employed at a construction site. **NaN Credit Hours**

### BUC 115 Roof and Ceiling Framing

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. NOTE: There is an approved standardized plan-of-instruction for this course. This course focuses on construction framing above the wall-plate line. Topics include ceiling framing roof framing, and trusses. Upon completion, students should be able to frame residential ceilings and roofs, design and build trusses and apply heavy timber construction principals. **4 Credit Hours**

### BUC 121 Floors and Walls Framing

This course focuses on floor and wall layout. Topics include leveling tools, framing, layouts, and components of wall and floor framing to include beams, girders, floor joists, sub-flooring, partitions, bracing, headers, sills, doors and corners. Upon completion, students should be able to properly perform basic construction framing procedures for floors and walls. **5 Credit Hours**

### BUC 131 Interior and Exterior Finishes

This course is designed to provide students an in-depth understanding of interior and exterior finishes. Topics include exterior wall coverings, flooring, and interior finishes. Upon completion, students should be able to install and apply interior and exterior finishes to walls and overhangs, and install floors. **5 Credit Hours**

### BUC 133 Building Codes

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. This course focuses on building codes, real estate, and project scheduling. Topics include real estate, project planning, specifications, company structure and organization, building codes and related legal aspects. Upon completion, students should be able to identify the components of the construction process, locate information in building code books, plan construction projects and understand the implications of various real estate issues. **NaN Credit Hours**

### BUC 141 On-grade Concrete Applications

This course emphasizes techniques and principles required to design on-grade concrete forms. Topics include concrete curbs, edge forms, footing forms, concrete piers and columns, and templates with anchor bolts and dowels. Upon completion, students should be able to perform on-grade concrete slab forming, wall forming, and set templates with anchor bolts. **5 Credit Hours**

### BUC 143 Above-Grade Concrete Applicati

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. This course emphasizes techniques and principles required to build above grade forms and to provide practice in constructing above-grade form systems. Topics include beam forms, slab forms, flying-form tables, crane-set wall panels, gang-form system for walls, and stair forms. Upon completion, students should be able to build above-grade concrete form systems, flying-form tables for scale, and build gang-form systems for walls and stairs. **4 Credit Hours**

### BUC 150 Homebuilders Licensure

This course prepares students to take the State Builders License exam for residential construction. Topics include basic residential frame and finish review, basic estimating, and associated areas. With appropriate field experience, upon completion, students should qualify to take the residential contractors exam. **3 Credit Hours**

### BUC 164 Decks and Patios

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. This course covers basic deck and patio design and construction. Topics include design criteria, sketching, estimating, and construction of decks, patios, and gazebos. Upon completion, students should be able to build a deck or patio from the ground up. **5 Credit Hours**

### BUC 214 Soils & Site Work

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. This course covers site conditions and soil types and their physical properties. Topics include site preparation, access, mechanical analysis, classification of soils, and hydrostatics of groundwater. Upon completion, students should be able to adequately prepare a building site according to plans and specifications. **3 Credit Hours**

### BUC 217 Construction Surveying

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. This course covers field surveying applications for residential and commercial construction. Topics include building layout and leveling, linear measurement and turning angles, plumbing vertical members, and topographic and utilities surveys. Upon completion, students should be able to properly and accurately use surveying equipment to lay out residential and commercial buildings. **4 Credit Hours**

### BUC 238 Cooperative Work Experience

PREREQUISITE: As determined by college. COREQUISITE: As determined by college. This course provides students work experience with a college-approved employer in an area directly related to the building construction industry. Emphasis is placed on integrating classroom and lab experiences with work experience. Upon completion, a student should be able to evaluate career selections and demonstrate employability skills and work-related competencies. **15 Credit Hours**