

BUILDING CONSTRUCTION (BCN)

BCN 1001 Intro to Building Construction (3 Credits)

This course provides a broad overview of the built environment, the architectural, engineering and construction (A/E/C) industry as well as different career paths within the industry. Insight into the processes, the people and the practices involved to bring a building from a concept to reality are presented. An emphasis will be placed on the construction management process and the critical role of the construction manager.

BCN 1215 Materials & Methods of Constr (2 Credits)

This course teaches and examines how various materials and construction methods associated with thermal and moisture protection; doors and windows, interior and exterior finishes; specialties and equipment; electrical; mechanical affect the construction cost, total life, and maintenance cost of a building. The merits of new materials and methods are introduced and compared to existing products and methods. The major focus is from a builder's perspective emphasizing proper installation procedures, coordination and processes.

BCN 1230 Cons Materials/Methods I (2 Credits)

This course offers in-depth knowledge of the materials and methods used in wood frame, masonry, concrete, and steel construction and a study of the fabrication of component units and their assembly at the construction site. Construction techniques are presented as related to sitework and the building envelope. This course covers major construction materials such as soil, concrete, masonry, wood and structural steel.

BCN 1732 OSHA Standards for Con Indus (2 Credits)

This course is an overview of the Occupational Safety and Health Act (OSHA) and its relationship to the construction industry. Topics include history, general OSHA standards, job safety, health hazards, fire protection and prevention, material storage, handling, use and disposal, and hand and power tools. Students receive OSHA 30 training upon successful completion of the class.

BCN 1757 Construction Accounting (3 Credits)

This course introduces construction accounting and the procedures for builders and contractors to establish and maintain a financial record keeping system.

BCN 2272 Blueprint Reading (3 Credits)

This course will develop the knowledge and skills involved in the effective use and interpretation of construction drawings and specifications. Students will learn how to examine a variety of different types of plans included within a standard set of drawings such as civil, landscape/irrigation, architectural, structural, MEP (Mechanical, Electrical, and Plumbing), fire protection and communications to understand the scope of the project and the means and methods required to construct the project. Basic construction abbreviations, symbols and various scaling will be introduced.

BCN 2440 Concrete Construction Methods (3 Credits)

This course teaches and examines concrete formwork & placement for residential, light commercial, and heavy construction, using ACI recommended practices and OSHA shoring recommendations. Topics include slab-on-grade placement & finishing techniques, prefabrication, reinforcing steel, form ties, openings, residential foundations, flatwork, precast concrete, concrete mixing, and placement.

BCN 2560 Mechanical and Electrical Syst (3 Credits)

This course teaches and examines the mechanical/electrical equipment commonly required in residential and commercial buildings. The course presents the fundamentals of heating, ventilation and air conditioning; electrical systems; communication systems; safety systems.

BCN 2721 Construction Schedule and Plan (3 Credits)

This is an introductory course in project scheduling and planning using Gantt charts, critical path method (CPM), precedence diagram and linear scheduling methods. Students will develop an understanding of resource leveling, cost loaded schedule, updating and expediting the schedule on construction projects. Students will learn to develop activities and sequences involved on a typical construction project.

BCN 2760 Building Code Regulations (3 Credits)

This course examines requirements by regulatory agencies pertaining to the construction industry. This course includes a complete study of the current edition of the standard building code and other regulations applicable to construction.

BCN 2793 Managing Building Construction (3 Credits)

This course covers techniques for planning, controlling, and coordinating building construction projects and construction companies. The fundamentals of project management specific to the construction industry will be provided in detail.

BCN 2941 Building Construction Management Internship (3 Credits)

This is a planned work-based experience that provides students with an opportunity to fine-tune skill sets learned in course work and enhance workplace skills through supervised practical experiences related to their career objectives. Individual objectives will be developed to address technology competencies. Each earned credit of internship requires a minimum of 50 clock hours of work. Refer to the Internship Handbook for additional information.