BCN: Building Construction Courses

Courses

BCN 2272 Blueprint Reading
3 sh (may not be repeated for credit)
Provides students with knowledge, skills and abilities to accurately interpret commercial construction documents. Addresses standards for construction drawings, drawing quality, drafting techniques and drawing literacy and information retrieval.

BCN 2405 Statics and Strength of Materials
3 sh (may not be repeated for credit)
Prerequisite: MAC 1114 AND PHY 2053
Analyze strength of structural elements for buildings, bridges and specialized structures that utilize steel and timber and concrete. Covers the statics of particles, rigid bodies, friction, strengths of materials such as wood, steel and concrete.

BCN 2905 Directed Study
1-12 sh (may be repeated indefinitely for credit)

BCN 3224 Construction Materials and Method
3 sh (may not be repeated for credit)
Explores changing materials, methods and technologies in construction. Focuses on the most common and practical building materials and methods to provide students with knowledge, skills and abilities related to the “means and methods” of construction.

BCN 3281C Construction Survey and Building Layout
3 sh (may not be repeated for credit)
Prerequisite: MAC 1114
Application of surveying skills required in the field of construction, including building layout, indirect determination of elevation and distance, referencing, establishment of grade, and topographic mapping. Instruments used will include transit and automatic level. Credit cannot be received for both BCN 3281C and BCN 3282C.

BCN 3561 Construction Mechanics
3 sh (may not be repeated for credit)
Introduction to electricity, power supply and distribution, communications, life safety, and security systems, electrical design and wiring, light and lighting, lighting equipment and systems, and calculations of illumination.

BCN 3731 Construction Safety
3 sh (may not be repeated for credit)
Addresses the principles of safety in construction and project management. Focuses on the OSHA 29 CFR 1926 Construction Industry Regulations, construction site risk aversion, insurance, site specific paperwork and documentation, maintenance of traffic, cost, scheduling and job hazard analysis.

BCN 3762 Building Codes
3 sh (may not be repeated for credit)
Covers the general requirements of the Florida Building Code for commercial construction, based on occupancy classification and construction type. Provides information about code agencies, organizations and resources related to the building construction approval process.

BCN 3767 CDT Prep Course: Construction Documents
3 sh (may not be repeated for credit)
Preparation for the National Construction Specification Exam for Construction Document Technician certification. Material and Supply fee will be assessed.

BCN 3905 Directed Study
1-12 sh (may be repeated indefinitely for credit)

BCN 4258C Building Information Modeling
3 sh (may not be repeated for credit)
Prerequisite: BCN 2272 AND BCN 3224
Introduction to 3D Modeling software for Building Information Modeling (BIM). Activities are designed to provide in-depth theory with the use of BIM information and the impact on construction contracts and processes. There is a downloadable free BIM program that will be used but the student must have their own computer to load the program and use it for this course.

BCN 4431 Structures I
3 sh (may not be repeated for credit)
Prerequisite: BCN 2405
Introduction to structural design using wood and steel. Structural behavior and properties of building materials will be covered as they apply to stresses in beams, columns, diaphragms, and structural connections.

BCN 4461 Structures II
3 sh (may not be repeated for credit)
Prerequisite: BCN 2405
Introduction to structural design of foundations and reinforced concrete elements. Structural behavior and properties of soils will be investigated as they apply to building foundations. Properties of reinforced concrete will be covered as they apply to stresses in beams, columns, and foundations.

BCN 4564 Construction Mechanics II
3 sh (may not be repeated for credit)
Prerequisite: BCN 3561
Introduction to electricity, power supply and distribution, communications, life safety, and security systems, electrical design and wiring, light and lighting, lighting equipment and systems, and calculations of illumination.
BCN 4701   Construction Administration
3 sh (may not be repeated for credit)
Overview of the construction industry and professional requirements of
management, administration and project management in construction
environments. Consideration of information required to sit for the
contractor's examination.

BCN 4720C   Scheduling
3 sh (may not be repeated for credit)
Provides fundamental concepts of scheduling techniques, applications
and software packages. Students will be provided hands on
experience with appropriate software.

BCN 4773   Construction Finance and Controls
3 sh (may not be repeated for credit)
Prerequisite: MAC 2233 OR MAC 2311
Examines application of construction ownership and business
management, and the principles and techniques needed for making
economic decisions about building systems and subsystems. 
Covers various aspects of construction management, financing,
risk management, labor law, and worker?s compensation. Basic
accounting practices are also covered. Students will also explore
decision making techniques pertaining to cost and value engineering.
Emphasis will be placed on the time-value of money and equivalence,
replacement analysis, uncertainty and life cycle costing.

BCN 4905   Directed Study
1-12 sh (may be repeated indefinitely for credit)

BCN 4940   Construction Internship/Senior Project
3 sh (may not be repeated for credit)
Field-based experience where students work in real-world situations
with industry professionals. Students unable to locate an internship
complete a complex problem solving project under the direction of the
instructor. Permission is required.