

BUILDING CONSTRUCTION TECHNOLOGY (BCT)

BCT 216. Sustainable Building I

Credits: 3

Typically Offered: SPRING

This course introduces and defines sustainable/green building. Energy efficiency and conservation will be studied as a system considering materials production, site selection and design, building construction, owning and maintaining a sustainable/green home, impact on the natural environment by the built environment, and the end of lifecycle and deconstruction of buildings. Emphasis will be placed on preparing students for Sustainable Building II in which students will design a sustainable/green built home and study the construction process and contracting of the home.

BCT 218. Sustainable Building Science II

Credits: 3

Prerequisite: BCT 216.

Typically Offered: SPRING

This course is a study of how the systems of a house are combined to form a sustainable/green built whole house system. Emphasis will be placed on the sequence of construction and the functioning interrelationship of the systems. Students will be required to design a home based on the concepts studied in BCT 216 and BCT 218.

BCT 222. Construction Safety

Credits: 3

Typically Offered: SPRING

This course parallels the 29CFR1926 OSHA Construction Industry Regulations and to conform to the National Center for Construction Education and Research (NCCER). The course covers both the compliance as well as best practices in the construction industry as they pertain to safety.

BCT 260. Residential Building Codes

Credits: 3

Typically Offered: SPRING

This course is a study of residential building codes. Students will learn specific codes, effective use of code books, and the importance of building codes on the home building industry.

BCT 264. Residential Energy Rating Systems

Credits: 3

Typically Offered: SPRING

This course studies how energy is used, conserved, and measured in the residential structure. National home energy rating and certification systems will be studied including LEED, Energy Star, and National Green Building Standard systems.

BCT 276. House Systems

Credits: 3

Prerequisite: CARP 110 or BCT 216.

Typically Offered: SPRING

This course is designed to give an overview of integrated residential home systems. Introductory study in the areas of mechanical and electrical systems will be provided. The study will be designed for students with little or no experience in the mechanical or electrical trades.