SBSY 5100. Sustainable Design and Technologies in Construction. 4 Hours.
Covers theory of sustainability and green building procedures; sustainable design and construction practices; use of appropriate materials and systems with low environmental impact for creating energy-efficient buildings; green construction practices, including reducing pollution, emissions, and construction waste; and U.S. Green Building Council’s LEED rating system. May be helpful to students preparing for the LEED Green Associate examination.

SBSY 5200. Sustainable Engineering Systems for Buildings. 4 Hours.
Focuses on basic design and construction of mechanical/electrical/plumbing (MEP) systems in buildings. Covers MEP documentation, plumbing water supply, HVAC systems, electrical power supply and distribution, lighting systems, low-voltage electrical systems, and estimating and planning for these specialty areas. Also addresses sustainable design and construction practices for MEP, including minimization of energy consumption and carbon footprint.

SBSY 5300. Information Systems for Integrated Project Delivery. 4 Hours.
Focuses on new software systems for increasing efficiency of project delivery and facilitating design and construction integration through the use of BIM (Building Information Modeling) and related technologies. Exposes students to various software systems, including hands-on cases of BIM use, 4D (construction drawings linked to schedule) modeling, and 5D models (4D + cost). Covers the impact of new technology on project delivery, including owner's perspective, advantages, and disadvantages. Also covers use and background of common industry systems to apply BIM concepts to construction projects.

SBSY 5400. Sustainable Building Systems Seminar. 0 Hours.
Features prominent speakers from the sustainable building design and construction industry to showcase new building technologies, tools, and projects and to discuss national and international trends in the industry. Offers students an opportunity to meet innovators and key players advancing the field of sustainable building systems.