

CERTIFICATE IN SUSTAINABLE ARCHITECTURE

Buildings are the world's largest consumer of energy and a major contributor to greenhouse gases and other harmful emissions and waste streams. The Certificate in Sustainable Architecture provides Architecture majors the opportunity to specialize in design and technical innovations that will increase building energy performance, reduce emissions, use eco-friendly materials, and thereby increase the durable societal value of the built environment. The design and retrofit of energy efficient buildings, better material choices, and improved occupant comfort are the primary skills acquired at the intermediate level through this certificate. Students will understand the foundations of sustainability and learn the skills to apply sustainability ratings, as well as understand the operational role of building systems and the social value of building form and space. Students will also acquire the tools to simulate, measure, and increase sustainability at the building and the urban scale.

CURRICULUM (12 Credits)

The Certificate in Sustainable Architecture is currently available to Architecture majors only.

3 Required Courses:

ARCH 4227, Architecture and Ecology

ARCH 4226, Green Construction

ARCH 4231, Environmental Systems II (prerequisite: ARCH 3231, Environmental Systems I)

1 Elective Courses from the list below:

ARCH 4141, Building Simulation in Design Practice (prerequisite: ARCH 4226, Green Construction)

ARCH 4151, History of Urban Form

ARCH 4320, Retrofitting Suburbia

ARCH 4447, Urban Ecological Design

ARCH 4805, Design Build South Africa I

ARCH 4801, Design Build South Africa II

NOTE: Students must earn a grade of "C" or higher in courses used to satisfy the requirements of the certificate. Courses used to satisfy the certificate requirements may be used to fulfill free electives required by the Institute, as well as Architecture electives for Architecture majors.