

Course Description:

This course introduces students to the LEED process. LEED, or Leadership in Energy and Environmental Design, is the global standard for green building certification. Throughout the course, students will gain an understanding of the various components of green building. The theme of sustainability and sustainable construction is woven throughout each module both in terms of physical environment and as it pertains to LEED certification.

Module	Objectives
Module 1: <i>Introduction to the LEED Process</i>	• Understand the mission, vision and non-profit role of USGBC/GBCI
	• Identify the structure and scope of each LEED rating system
	• Evaluate the LEED development process
	• Understand credit and Impact categories
	• Outline the LEED certification process and other rating systems

Module 2: Integrative Strategies	• Understand the Integrative process
	• Evaluate the duties and roles of project team members
	• Identify the education requirements for each integrative team member
	• Analyze the standards that support LEED

Module 3: Location, Transportation, and Sustainable Sites	• Identify the thought components of site selection
	• Investigate alternative transportation types, access, and quality
	• Evaluate the infrastructure and design of alternative transportation
	• Identify the thought components of site assessment
	• Evaluate the components of site design and development

Module 4: Water Efficiency	• Identify the green alternatives for outdoor water efficiency
	• Identify the green alternatives for indoor water efficiency
	• Evaluate the types and quality of indoor water-efficient appliances and fixtures
	• Understand water performance management over the lifetime of a structure

Module 5: Energy and Atmosphere	• Identify the components of building loads
	• Identify the green alternatives for outdoor energy efficiency as well as energy auditing
	• Analyze alternative and renewable energy practices
	• Understand energy performance management over the lifetime of a structure
	• Evaluate environmental concerns associated with energy management

Module 6: Materials and Resources	• Describe the need for reuse of materials and resources
	• Evaluate life-cycle impacts including life-cycle assessment
	• Identify the types of waste
	• Analyze the components of a waste management plan
	• Evaluate the need for purchasing and disclosures as related to the EPP

Module 7: Indoor Environmental Quality	• Identify the risk factors to indoor air quality
	• Identify the green alternatives for indoor air quality
	• Understand the need and value of lighting quality and the various green alternatives
	• Identify the green alternatives of acoustics
	• Evaluate the value and tools to support occupant comfort, health, and satisfaction

<i>Module 8: Project Surroundings, Public Outreach, and Exam Preparation</i>	• Evaluate the environmental impacts of the built environment
	• Understand the relationship between LEED and codes
	• Analyze the values of sustainable design
	• Understand the need for regional green design and construction measures
	• Understand the structure and requirements of the LEED Green Associate Certification Exam