



Green Building Course

Introduction to LEED Green Associate and New Design & Construction

Test Prep: The program is designed to assist in preparing to take the LEED Green Associate Exam

Class Syllabus

This certificate program responds to the growing need for specially trained professionals who are able to adapt to a changing industry and culture. This is an exciting time in the building industry. LEED – guided, healthy, high-performance buildings are quickly becoming the standard for progressive cities, school districts and the private sector. There is a place for all disciplines in this comprehensive collaborative practice.

The LEED Green Associate credential is a new title created to allow a person to demonstrate green building expertise in nontechnical fields of practice. It denotes basic knowledge of green design, construction, and operations. The LEED Green Associate credential also serves as the first step for professionals pursuing a LEED Accredited Professional (AP) specialization.

This program is designed to assist in preparing to take the USGBC LEED Green Associate exam.

Introduction to Green Building

The first phase of the class will focus on preparing the student with the prerequisite required to successfully understand the Green Building/Sustainability content. General terms and concepts utilized in the design/construction industry as they relate to sustainability will be reviewed.

Introduction to Sustainability, Green Building and the US Green Building Council

This section will provide an introduction to sustainability by discussing the principles of sustainability and green building. The history and structure of the US Green Building Council, the LEED rating system and other green building resources will be covered.

Sense of Place: Site Development and Sustainable Landscapes

Sustainable site selection, transit-oriented design, and neighborhood development will be addressed in this section. The importance of building orientation, sustainable, native landscapes, stormwater management, and strategies for reducing light pollution as well as heat island effect will also be discussed.

Integrated Energy Systems: Energy Efficient Design, Indoor Environmental Quality and Commissioning

Energy-efficient design will be addressed, including integrated design, energy-efficient mechanical systems, and balancing energy efficiency with indoor air quality. An overview of the importance and process of commissioning will be given.

Environmentally Sensitive Construction Materials: Exterior and Interior Materials, Construction Waste, and Building Recycling and Material Reuse

This section will cover green material selection for the design, specification and construction of sustainable structures. Green material attributes and costs will be addressed, as well as deconstruction and construction waste reduction practices.

Indoor Environmental Quality, Materials, Occupant Health and Comfort

The discussion of sustainable material selection will continue in this section as viewed from the point of indoor environmental quality. Occupant health and productivity will also be addressed.

Green Homes and Commercial Interiors

This section provides an overview of this fast growing, dynamic field. The program will focus on site and home design, energy-efficient envelope, high performance HVAC systems, natural home building techniques, economics of green homes, and green rating systems.

The Integrated Design Process

This section will discuss the Construction Management of a LEED commercial project, as well as case studies of LEED projects.

The Economics of Green Building and On-going Sustainability

This section will focus on making the business case for green building and maintaining and operating a building for ongoing sustainability. An overview of the course will be given, with additional preparation for the LEED Green Associate Exam.

LEED Green Associates Test Prep

This section will be an intensive preparation for the LEED Green Associate Exam, including the Building Design and Construction portion.

Sustainability Charrette

Following a presentation, the students will participate in a LEED design charrette.

Time/Date

The Tuesday and Thursday night classes will be from 5:30–7:30 pm. The classes begin April 7 and end May 26.

Locations

Colorado State University – Pueblo Continuing Education
Citadel Center, 730 Citadel Dr. East, Suite 300
Colorado Springs, Colorado

Auraria Higher Education Center
Room 008
1100 Lawrence St.
Denver, CO

Peterson AFB
Colorado Springs, CO

The program will originate from Colorado State University – Pueblo Citadel Center in Colorado Springs and the Auraria Higher Education Center in Denver. All locations will be able to utilize videoconferencing to interact with the instructors in real time. The instructors are noted professional experts in their various fields.

Registration

The program starts on April 7 and ends on May 26. The class will meet on Tuesday and Thursday nights from 5:30–7:30 pm.

Registration Cost: \$1,985

Registration includes the required study guides (a \$200 value).

Completed registration forms or vouchers may be:

Faxed to: 970–282–0396

Scanned and e-mailed to: constructedu@mindspring.com

Mailed to: PDI, Inc.
4863 Twin Peaks Cir.
Fort Collins, CO 80528

Green Building Program Proposed Schedule

<u>Date</u>	<u>Class Title</u>
Class 1	Introduction to Sustainability, the US Green Building Council and the LEED rating system
Class 2	Construction Industry Concepts and Trends
Class 3	Construction Industry Concepts and Trends
Class 4	Understanding the LEED Accreditation Process & Exam Prep Requirements
Class 5	Sense of Place: Site Development, Sustainable Communities and Transit-Oriented Development
Class 6	Deconstruction, Material Reuse, & Construction Waste Recycling:
Class 7	Indoor Environmental Quality and the Health and Productivity Benefits of Sustainable Design
Class 8	Integrated Building Energy Systems: Energy Efficient Design, Indoor Environmental Quality, and Basic Commissioning
Class 9	Enhanced Commissioning: Energy Conservation and Operational Cost Benefits
Class 10	Environmentally Sensitive Construction Materials: Building Materials & Resources
Class 11	Existing Building Operations & Maintenance (EBOM), Indoor Plumbing Water Efficiency
Class 12	Green Homes and Commercial Interiors
Class 13	The Economics of Green Building and the Future of Sustainability
Class 14	Preparing for a Standardized Test and LEED Green Associate Exam test prep
Class 15	The Integrated Design Process and Sustainability Charrette

For more information, contact Larry Grosse, PhD.
970-222-4460
constructedu@mindspring.com