LEED AP BD+C Online Study Course

DESCRIPTION:
Successfully prepare for the LEED AP Building Design + Construction (BD+C) exam with this 2-month virtual classroom LEED AP BD+C study course. The LEED AP Building Design + Construction credential demonstrates advanced knowledge of green building practices with specialization in the Green Building Design + Construction LEED rating systems (New Construction, Schools and Core & Shell). This credential is designed for professionals with hands-on technical experience on a LEED® registered and/or certified project, including architects, designers, engineers, designers, and building managers. The approximately 30 hours of activities in this study course provide fundamental knowledge for the LEED AP BD+C exam and make it an important element of your study plan. Access the on-line readings, recorded audio presentations and practice test questions whenever convenient; you are encouraged to submit comments and questions to online discussions several times a week to maximize your learning.

COURSE OBJECTIVES:
- Provide a comprehensive understanding of the LEED Building Design and Construction Guideline requirements, documentation, implementation and strategies
- Address new categories, prerequisites, and credits in the 2012 LEED New Construction Rating System to prepare students for the evolving Green Building Industry.
- Have tools for working on LEED projects that foster team integration and a sustainable design and construction process at every phase of a project.
- Identify LEED credit synergies and sustainable strategies that optimize LEED goals with triple bottom line (social, environmental and economic) benefits.
- Perform exercises from REAL case studies to apply the principals in the context of LEED projects.

LEARNING OBJECTIVES:
- Understand the LEED NC scorecard, Manual and LEED Online well enough to take the LEED AP+ EXAM and know how to perform the role of a LEED Project Administrator
- Possess valuable tools for working on LEED projects, and resources that dig deeper into specific Sustainable Practices.
- Have tools for working on LEED projects that foster team integration and a sustainable design and construction process at every phase of a project.
- Gain industry knowledge of what systems and products are available to help a project meet or exceed Green Building goals.
- Get a broader understanding of how the USGBC and LEED Rating Systems are affecting International, Federal, State and local building code.

AGENDA
Unit 1: LEED Overview, Process and Updates with NEW 2012 Integrated Process

LEED Rating System updates, LEED Online and new Integrated Process category
- The LEED overview includes LEED online, letter templates, Credit Interpretation Requests, Appeals, Regional Priority Credits, and the new LEED Interpretations Process Category.
- Gain tools and methods to streamline the LEED documentation process.
- Students learn how to be active participants in an Integrated Process, and how it applies to this new LEED category, including, eco-charrettes, identifying credit synergies.
- Learn how to work with shared knowledge tools, such as BIM and related tools throughout the design and construction process.
Unit 2: Site: Sustainable Design and Construction & NEW 2012 Location and Linkages

Strategies for alternative transportation, heat island, storm-water & site construction management
- Comprehensive look at the NEW LEED Location and Linkages & Sustainable Sites categories.
- The topics cover alternative transportation, site construction pollution prevention, stormwater management, heat island effect, brownfields and green space.
- Strategies cover resources and construction management best practices for the site and broader neighborhood context.
- Beyond the individual strategies, synergies within sustainable design and construction methods are examined through case studies.

Unit 3: Water: Strategies for Reduction, Reuse, Alternatives and LEED Synergies

Strategies for reducing fixture, process and irrigation potable water use
- Covers water conservation and reuse strategies in the LEED Water Efficiency category.
- Students learn what resources and standards to use to establish a baseline according to building type and occupants that can then be used to measure the water efficiency measure.
- Various measures to reduce potable water use are illustrated, including rain water harvesting, innovative waste water technologies/treatment, grey water reuse, water conserving fixtures, and efficient landscaping.

Unit 4: Energy: Efficiency, Renewable Energy, Green Power, Carbon Offsets and Refrigerants

Energy strategies from passive, mechanical and renewable energy technology that optimize goals
- This unit covers energy efficiency, renewable energy, and building systems to maximize these LEED points and provide the most long-term savings.
- Strategies from pre-design looking at site orientation and microclimate factors to reduce load to the importance of ongoing maintenance and monitoring of systems.
- The refrigerants affect on Ozone Depletion Potential and Global Warming Potential.
- The latest renewable energy technologies are examined on both a site and district scale.
- The benefits of looking at integrated building systems with real life case studies.

Unit 5: Materials & Resources: Acquisition and Documentation Tools for LEED Buildings

Requirements, standards, and tools for streamlining LEED material selection and documentation
- The requirements of the Material and Resource category of LEED.
- Covering sustainable product purchasing, building reuse, regional material, and construction waste management.
- Resources to verify green products for LEED projects, and avoid green-washing
- Tools to streamline the documentation and verification process are utilized with exercises that simulate field experience.
- LEED 2012 updates to Sustainable material attributes that require a Life Cycle Assessment (LCA) approach taking into consideration long-term impacts of process and chemicals.

Unit 6: Indoor Environmental Quality: Health, Safety and Wellness Problems and Solutions

LEED Guidelines for healthy environments during construction and post-occupancy
- Covers the Indoor Environmental Quality section of LEED.
- Illustrates the importance of a connection to natural light and fresh air by passive means, and efficient high performance mechanical systems for buildings.
Case studies illustrate strategies and the importance of integrated design, from start to finish to identify cost-saving synergies among systems starting in pre-design.

Strategies for healthy indoor environmental through low-emitting materials, natural ventilation, CO2 monitoring, and construction best practices integrated with safety on-site.

Unit 7: Innovative Design and NEW 2012 Performance Category with Case Studies

Applied strategies, cost-benefit analysis and measurement from pre-design through post occupancy

- Real world case studies are used to show applied strategies from the previous course units.
- Systems, design and process are all addressed from pre-design through ongoing operations.
- The NEW Performance Category in LEED will be covered to show how measurement, auditing and verification are used to benefit ongoing building performance.
- Students will work together in a cost-benefit analysis exercise simulating an eco-charrette with the design and construction team, owner and tenants to identify project goals and evaluate innovative strategies.

Unit 8: LEED AP+ Building Design and Construction Test Prep Review

Test Breakdown, Practice Questions, Registration and Continuing Education

- Overview of the LEED AP+ Building Design and Construction Test is broken down
- Learn how to study, strategies on test day, and what is required once you become a LEED AP+ Building Design and Construction accredited professional.
- Practice tests and time for questions opened at the end.

COURSE INSTRUCTOR
Summer Gorder LEED® AP+ BD&C, AIA Portland Board of Directors

Summer Gorder, a recognized leader in the Green Building industry, provides innovative sustainable design and construction solutions that allow teams and building systems to be more effective and efficient. Her expertise comes from over a decade of management and design experience with Sienna Architecture Company where her team guided the first international LEED Neighborhood Development Pilot Project in Dubai, as well as the world’s first “Living Building,” which is currently under construction in Portland, OR. In 2009, Summer founded ecoREAL in order to provide comprehensive educational and consulting services to help guide companies through the new and growing sustainable development industry. To achieve this, she developed a unique LEED education program that includes a DVD series, “LEED in the REAL World,” as well as interactive and proprietary Green Building Implementation and Management (GBIM) software. Summer’s LEED Project Management and Administration goes beyond the drafting board to a “boots on the ground” approach, using tools that make teams self-sufficient while greatly reducing costly change-orders and RFI’s. Additionally, she is an expert in teaching and leading integrated processes that have proven to provide unmatched value to both new construction LEED BD+C and LEED O+M existing building projects in the public and private sectors.

Cost:
Two month online course, Summer Gorder LEED® AP+ BD&C, AIA Portland Board of Directors, instructor, $799 + tax, including materials.