LEED® Lab™

WELCOME PACKET

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Getting Started

Have you decided to host a LEED Lab on campus, or are you interested in learning how to move forward with this experiential learning course? This welcome packet will provide you with the tools and resources needed to make LEED Lab a success on your campus.

WHAT

LEED Lab is a multidisciplinary immersion course that utilizes the built environment to educate and prepare students to become green building leaders and sustainability-focused citizens. Through the course, students assess the performance of existing facilities on campus and chose one building where they will facilitate the LEED for Building Operations & Maintenance (LEED O+M) process with the goal of certifying the facility. At the close of the semester the students are prepared to sit for the LEED O+M professional credential exam. LEED Lab meets the needs of industry by equipping students with the skills, knowledge and expertise needed to be effective communicators, project managers, critical thinkers, problem solvers, engaged leaders and team players.

WHY

The campus environment can serve as the perfect learning laboratory, engaging students in projects that are experiential in nature and providing these individuals with the knowledge, expertise and skills needed to solve the complex 21st century challenges. Higher education institutions are committing to sustainability and climate neutrality on a daily basis however this sector also
faces significant hurdles when it comes to time and resources. Creating opportunities to link academics with operations on campus can be a win-win for all involved. LEED Lab can help to bridge this gap building capacity on campus for sustainable integration efforts and preparing the future leaders and global citizens to be ready for their careers.

**HOW**
LEED Lab focuses on integrating sustainable practices into daily campus operations and maintenance. The course utilizes the LEED O+M rating system, which promotes the ongoing implementation of best practices in building operations with a goal of sustaining high levels of performance. Built-in prescriptive and performance strategies are intended to provide operational benefits throughout the life of the building. By employing these strategies, the building can maintain and even improve its performance over time.

**ALIGN WITH YOUR CURRENT ACADEMIC YEAR**
You shouldn’t expect to complete the entire implementation and certification process in one academic term. Most LEED Labs will be a two-year process, but more ambitious teams may be able to certify one building per year. The LEED certification process consists of different activities, establishment and performance, which can be divided between academic terms. The *LEED Lab Timing Chart* further explores what activities can or should be tackled first. *USGBC* can work with you to determine the best sequence for your academic calendar.

**DECIDE IF A CAMPUS APPROACH IS APPROPRIATE**
You can choose to start with a single building, or to use the *LEED Campus Guidance* to take advantage of shared campus systems and management policies. Many credits in LEED, such as those focused on purchasing, site maintenance, pest control, and waste management, can be implemented at the campus level. The *LEED Campus Guidance* includes an option for achieving pre-approval of these campus-wide credits that can then be automatically approved on any building on campus. Once the campus-wide credits are completed, the next step will be to focus on building-specific credits. The *LEED Lab Timing Chart* includes a credit breakdown for both a campus approach and a single building approach.

**SELECT THE FIRST BUILDING TO CERTIFY**
Conduct a quick feasibility study of some of the possible candidate buildings on campus to evaluate their ability to meet the major prerequisites for building-level metering, energy efficiency performance, minimum ventilation,
and indoor water efficiency. Use the Campus Implementation Workbook to capture what is happening on campus and within the buildings of study. We recommend you choose a building where you are confident of success. Newer facilities, particularly those certified under LEED for New Construction, are a good place to start.

**CHOOSE A CERTIFICATION PATHWAY**

With the introduction of Arc, two certification pathways now exist for LEED O+M projects. Projects choosing the traditional pathway will document the project within LEED Online and must comply with all LEED O+M prerequisites and earn a minimum of 40 points. Projects choosing the performance pathway will provide data across five categories – Energy, Water, Waste, Transportation, and Human Experience – in the Arc platform to generate a performance score. In order to achieve certification, the project must achieve a minimum performance score of 40, in addition to complying with all LEED O+M prerequisites.

When deciding which pathway to pursue, review the LEED Lab Timing Chart and consider how each option aligns with your pedagogical goals and certification strategy. For example, the simplified performance testing requirements of the performance pathway allow for more self-directed work, whereas the traditional pathway may entail additional training for students in areas such as the energy audit. The streamlined submittals of the performance pathway also allow the course to move more swiftly through the certification process. On the other hand, the more prescriptive nature of the traditional pathway provides a step by step process for improving performance and allows for the attempting of innovation strategies. In both cases, when preparing students for the LEED O+M AP exam, the instructor should be aware of any gaps between what has been learned through project experience and the full range of topics that will be tested on the exam.

**Options for Previously Certified Projects**

Projects previously certified under LEED O+M or BD+C, may choose to update their certification using the performance score within Arc. No additional documentation of prerequisites is required.

Questions about the options? Speak with USGBC to understand the different aspects of each pathway.

**CREATE THE BUDGET**

Review the certification fees for LEED O+M and evaluate whether your USGBC membership level meets your needs. Schedule a call with USGBC to discuss options.
REGISTER YOUR CAMPUS, MASTER SITE, AND/OR PROJECT

To register a new campus, master site, and/or project, you will need a USGBC.org site user account. This site user account will provide access to both USGBC.org, LEED Online, and Arc.

Projects pursuing the performance pathway must register in Arc. Campuses and projects pursuing the traditional pathway are registered in LEED Online. If choosing to register a single project, select “Projects” in the LEED Online sidebar. If choosing to register a new campus, select “Campuses” in the LEED Online sidebar.
Resources

LEED LAB RESOURCES

Campus Implementation Workbook
The workbook is designed to assist higher education campus teams with creating a green existing buildings program, implementing the LEED for Building Operations & Maintenance rating system at the campus and building level, and establishing a culture of performance. In particular, Stage 3: Building Feasibility Study can be used to help select appropriate buildings for a LEED Lab.

The Paid From Savings Guide to Green Existing Buildings
The Paid-From-Savings Guide to Green Existing Buildings provides information to help building facilities managers and energy service companies (ESCOs) leverage utility cost savings to fund comprehensive green building retrofits. The resource provides detailed information on how to aggregate green improvement measures to optimize project economics and achieve LEED O+M certification. Free for educational institutions.

Roadmap to a Green Campus
The Roadmap is a strategy guide for using the LEED green building certification program as a framework for developing and evolving campus-wide sustainability plans. Contained within the 100+ page document are more than 100 tools and resources to support campuses in their greening efforts and more than 20 unique profiles of college and university success stories. The guide was created with the support of the Association for the Advancement of Sustainability in Higher Education (AASHE).

LEED Lab Timing Chart
The Timing Chart breaks down the activities associated with each credit and prerequisite into the establishment and performance categories. Establishment activities should typically be completed first, as they are less subject to change and will set up the project for success as students begin the ongoing tracking activities. Note that audits and other one-time events (such as the Alternative Transportation Survey) must fall within the performance period for the LEED Lab project building.
Education @USGBC is the way USGBC is providing best-in-class green building and sustainability education to meet the needs of all learners. Grow your green building knowledge and access educational content for your LEED Lab on the Education @USGBC platform.

CREDENTIAL RESOURCES

LEED v4 AP O+M Candidate Handbook
The Candidate Handbook represents current policies and procedures for a LEED v4 O+M professional credentialing exam. Includes test specifications.

LEED O+M RESOURCES

LEED v4
This is your one stop shop for information and resources regarding LEED v4.

LEED Credit Library
The library contains LEED credit requirements, guidance, tools, supporting resources and sample LEED Forms (the LEED Online forms used to collect data and documentation), which can be downloaded for use in class.

LEED User
Ask questions, share tips, and get notified of new forum posts by joining LEEDuser, a tool developed by BuildingGreen and supported by USGBC.

Arc
The Arc platform allows users to measure performance, make improvements and benchmark against other projects. Arc is a complement to LEED and other green building rating systems, standards, protocols and guidelines and allows buildings and spaces to compare performance metrics and connect those metrics to green building strategies. Arc enables incremental improvements and can put a project on track for LEED or other rating system certification.

Videos guiding project teams through the key steps that are accomplished within Arc are located here.
**LEED Online**
Streamline your LEED project management experience, organize your work, and engage with your whole team. Project teams using the traditional O+M pathway document their project in LEED Online. For tips on navigating LEED Online, visit our FAQ here.

**LEED Reference Guides**
The LEED Reference Guide for Green Building Operations and Maintenance is the most comprehensive guide for the LEED O+M Rating System. Hard copies and e-documents are available for purchase.

LEEDv4 introduces a new fully interactive web-based reference guide which serves as a simple, one-stop-shop for all LEED v4 resources for all rating systems including over 50 multimedia modules, tutorials and case studies to help your project succeed.

**LEED Campus Guidance**
This guidance is for projects that are on a shared site under the control of a single entity; for example, a corporate or educational campus, government installation or commercial development.

This guidance seeks to encourage a holistic approach to project management; define campus-appropriate documentation requirements and capture economies of scale in the certification process; address the unique challenges and opportunities inherent in campus projects; and maintain the technical integrity and rigor of the LEED rating systems.

**EQ Space Type Matrix**
Guidance on how each Environmental Quality credit applies to different space types within a building.