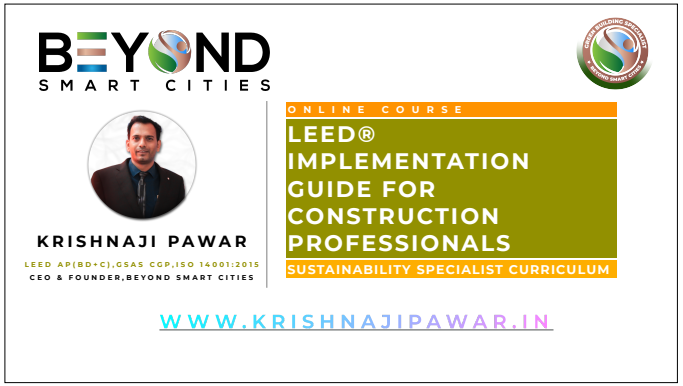
BEYOND
SMART CITIES
LEED®IMPLEMENTATION GUIDE
FOR CONSTRUCTION PROFESSIONALS
KRISHNAJI PAWAR,LEED AP BD+C,GSAS CGP,ISO 14001:2015,GCP
SUSTAINABILITY SPECIALIST ONLINE CURRICULUM COURSE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GUIDE FOR
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SUSTAINABILITY SPECIALIST CURRICULUM
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LEARNING OBJECTIVES

- Identify the intent and use of the LEED Implementation Guide.
- At a minimum, include details on who is intended to use the guide, what the specific purpose of the various categories and sections are and when the guide should be implemented and utilized.
- This manual or guide can also assist owners interested in building a LEED certified facility.
- GENERAL CONTRACTORS AND LEED: Contractor's Role.

WHO IS THIS COURSE FOR?

- Engineers who are working in LEED(BD+C) Projects and wants to understand more about LEED (BD+C)Implementation During Construction
- Learners will get the knowledge required to understand basic information about Building Construction Services.
- General Contractors, Construction Managers, and Engineers can use the LEED implementation guide as a reference for managing their LEED Certification Process.
- The proposed LEED®Implementation Guide can also assist owners interested in building a LEED certified facility.

LEED®IMPLEMENTATION GUIDE

FOR CONSTRUCTION PROFESSIONALS

COURSE OUTLINE

- What is Green Design?Benefits
- Responsibilities of a Contractor
- LEED Requirements & Commissioning Activities
- Development of LEED Project Manual
- LEED Information and Tools

WHAT IS A GREEN BUILDING RATING SYSTEM?

- A Quantitative System to evaluate and measure the environmental impact of a building on the environment.
  - Site
  - Water
  - Materials
  - Energy
  - Indoor Environment
- It evaluates the "whole building"
  - Integration of systems is crucial to achieving Green
- The Most Widely Used Rating System is LEED

GREEN BUILDING RATING SYSTEMS

- Reduce energy consumption
- Reduce water consumption
- Reduce materials waste
- Reduce heat island effect
- Improve indoor air quality
- Reduce absenteeism
- Reduce Toxins in environment
- Improve productivity
- Preserve open space
- Preserve species habitat
- Improve asset value
- Increase infrastructure vitality

LEED GREEN BUILDING RATING SYSTEM

LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world.
Developed by the U.S. Green Building Council
www.usgbc.org

GRIHA LEED IGBC GORD GSAS

U.S. GREEN BUILDING COUNCIL

The U.S. Green Building Council (USGBC), co-founded by Mike Italiano, David Gottfried and Rick Fedrizzi in 1993, is a private 501(c)3, membership-based non-profit organization that promotes sustainability in building design, construction, and operation.

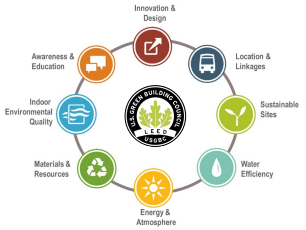
- Non-profit organization with 6,000+ members.
- Voluntary, diverse membership that operates on consensus principles
- Developer and administrative authority of the LEED Green Building Rating System

LEED PRINCIPALS

LEED Primary Objective

"Transform existing building markets so that sustainable design, construction, and operations practices are mainstreamed."

- Consensus process involving many stakeholders in the building industry
- To define, promote, and standardize green design
- To promote a whole-building integrated design process

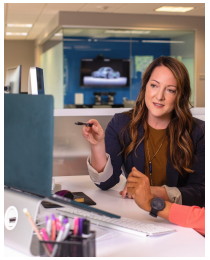


LEED SCORECARD

- LOCATION AND TRANSPORTATION (0PR/7C/16P)
- SUSTAINABLE SITES (1PR/6C/10P)
- WATER EFFICIENCY (3PR/4C/11P)
- ENERGY AND ATMOSPHERE (4PR/6C/33P)
- MATERIALS AND RESOURCES (1PR/5C/13P)
- INDOOR ENVIRONMENTAL QUALITY (2PR/9C/16P)
- INTEGRATIVE PROCESS(0PR/1C/1P)
- INNOVATION (0PR/2C/6P)
- REGIONAL PRIORITY (0PR/1C/4P)

TOTAL (11 PRE REQUISITE / 44 CREDIT /110 POINT)

BENEFITS OF LEED ACCREDITATION



- Give your business the competitive advantage
- Attract more customers with energy-saving benefits.
- Stay informed on the latest green building techniques.
- You'll be connected to an international network of sustainability advocates.
- Green jobs are in demand

CONTRACTOR RESPOSIBILITIES

LEED Requirements– General project LEED Division 1 specifications section to include contractor LEED credit requirements, LEED thresholds, and required LEED Plan specifications.

Commissioning Activities– Details and descriptions of the commissioning process for the buildings seeking LEED certification.

This section should include a general overview of the commissioning process, definitions of terms and documents, and a general LEED commissioning specification section.

Erosion and Sedimentation Control Plan– Details and descriptions of the erosion and sedimentation control plan (ESC) requirements, including those specific to Sustainable Sites prerequisite 1 – Construction Activity Pollution Prevention (SSp1).

This section should include a general overview of the ESC requirements, definitions of terms, and a sample ESC plan which meets LEED credit requirements.

Erosion and Sedimentation Control Plan Sample

CONTRACTOR RESPOSIBILITIES +

Construction Waste Management Plan - Details and descriptions of the construction waste management (CWM) requirements, including those specific to Materials and Resources credit .

This section should include a general overview of the CWM requirements, definitions of terms, and a sample CWM plan which meets LEED credit requirements.

Construction Waste Management Plan Sample

Construction Indoor Air Quality Management Plan- Details and descriptions of the construction indoor air quality management plan (IAQ) requirements, including those specific to Indoor Environmental Quality credit – Construction Indoor Air Quality Management Plan – During Construction.

This section should include a general overview of the IAQ plan requirements, definitions of terms, and a sample IAQ plan which meets LEED credit requirements.

Construction Indoor Air Quality Management Plan Sample

LEED INFORMATION TOOLS

LEED Tracking & Reporting Instructions– Include LEED credit specific guidance and protocols for the tracking, reporting, and maintenance of LEED product and project information.

LEED Product & Material Submittal Review Process– Detailed protocol for submittal review process, including approval of applicable product information with LEED credit specific guidance.

LEED Material Transmittal Form– Include template form for the collection and transmittal of LEED information.

Ensure template transmittal form requests all necessary LEED material information. Include protocol for use of the transmittal form.

LEED INFORMATION TOOLS +

LEED Tracking Worksheets– Include template worksheets for the tracking of credit specific LEED information.

Include guidance and protocols on the intended use of the tracking worksheets.

Summary of Low-Emitting Referenced Standards– Referenced standards for threshold limits of Indoor Environmental Quality credits if applicable – Low Emitting Materials.

Sample Product Information– Provide sample compliant product information and/or documentation and cut-sheets for Contractor reference (e.g., carpet adhesive cut-sheet with VOC content for IEA).

It is recommended that the Contractor highlight or circle the applicable information on the product cutsheet for quick reference.