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CERTIFIED COMMISSIONING AUTHORITY CXA EXAM PREP
ONLINE PROFESSIONAL COURSES LED BY THE WORLD'S TOP SPECIALISTS
ONLINE TRAINING BY KRISHNAJI PAWAR
LEED AP(BD+C),GSAS CGP,GCP,ISO 14001
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MODULE 20

LEED and Commissioning

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CERTIFIED COMMISSIONING AUTHORITY CXA EXAM PREP OVERVIEW

Leading companies are focusing on energy and sustainability programs to build resilience, energy availability, climate change mitigation, and risk management. Despite the obstacles, organizations are considering new resilience strategies to combat new threats. Learning about disruption and resilience can help companies recover.

Learning Objectives

- Introduction
- LEED Program and Benefits
- LEED Certification & Systems Verification
- How do Commissioning Agents Use LEED?
- Which LEED Credential Does a CxA
- Benefits of LEED Commissioning
- Why It's Worth It?

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INTRODUCTION

- According to the LEED Reference Guide, the official objective of this prerequisite is to "verify and ensure that fundamental building elements and systems are designed, installed, and calibrated to operate as intended.
- "Commissioning Authorities (CxA) and the United States Green Building Council (USGBC) intend to initiate the commissioning (Cx) process early in the design phase and execute additional activities following system performance verification.
- Historically, GL has provided commissioning services for projects when managing the LEED certification process, as it streamlines the process, improves efficiencies, and reduces construction disruption.
- Once all Fundamental Commissioning requirements are met, CXA will provide the United States Green Building Council with documentation as evidence of completed tasks.
- The Commissioning Authority (CxA) is required to upload a copy of the commissioning plan that highlights the six tasks.

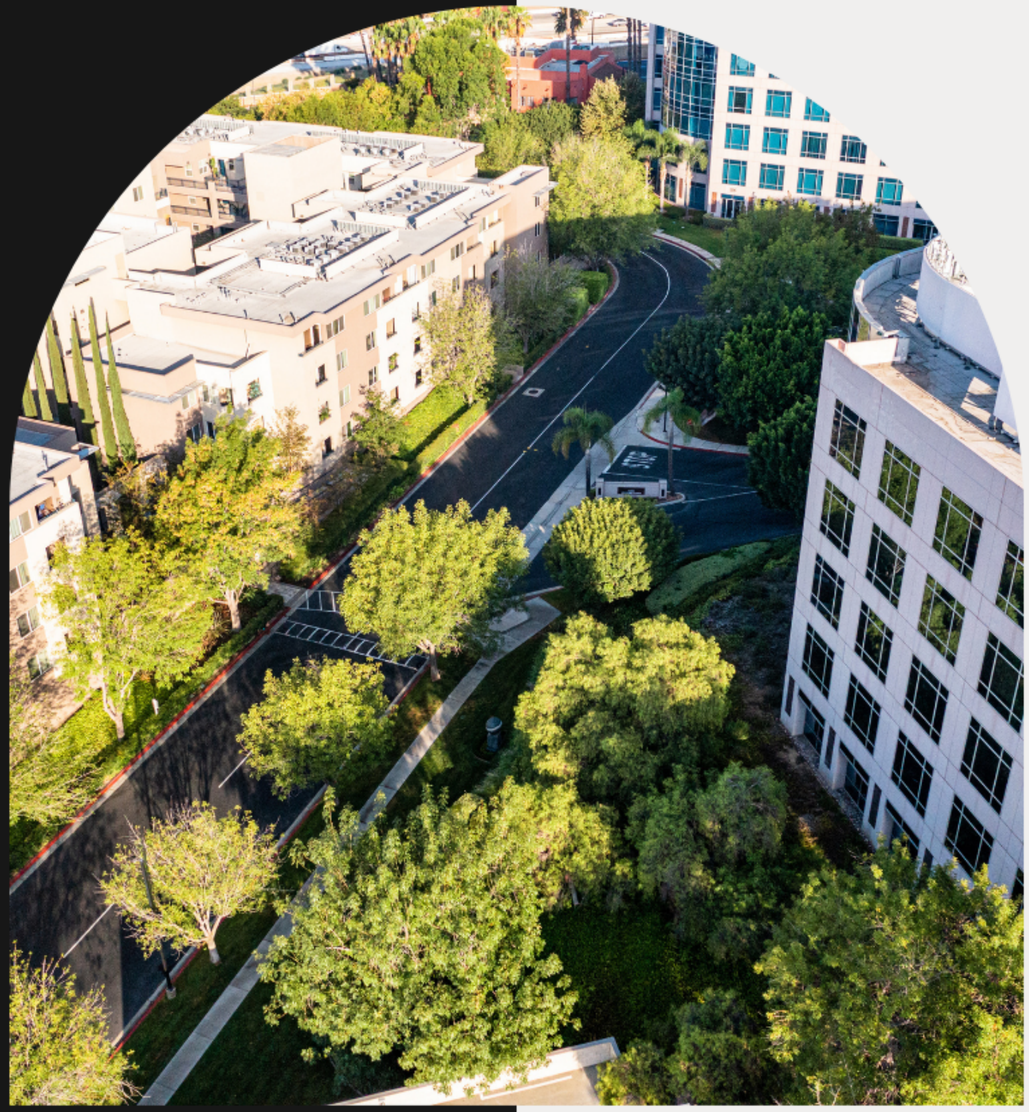
LEED PROGRAM AND BENEFITS

- The LEED building commissioning process is an extremely efficient method for enhancing the performance of building systems and equipment.
- The Leadership in Energy and Environmental Design (LEED) standards share the objective of enhancing the performance of buildings.
- Building commissioning is the process of verifying that a structure's energy-related systems and equipment have been installed and are operating as intended.
- Commissioning provides assurance of quality throughout all phases of new construction.
- Commissioned buildings typically have fewer change orders, are more energy efficient, and have lower operating and maintenance expenses.

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LEED CERTIFICATION & SYSTEMS VERIFICATION

LEED CERTIFICATION & SYSTEMS VERIFICATION+

- Commissioning is now incorporated into the LEED certification process to provide benefits for green buildings.
- The LEED Building Design + Construction (BD+C) Rating System addresses building commissioning in the Energy and Atmosphere section, earning up to 6 bonus points.
- Commissioning is often associated with energy savings but can positively affect many other LEED credit categories.
- LEED Version 3 and LEED Version 4 differ in that LEED now requires hiring a commissioning agent by the end of the design development phase.
- The demand for commissioning services has increased due to the recognition of building commissioning in LEED standards.



HOW DO COMMISSIONING AGENTS USE LEED?

- Commissioning agents must be knowledgeable about LEED requirements to succeed in the rapidly growing field of LEED projects.
- This knowledge makes the commissioning process smoother, allowing commissioning agents to understand the owner's design intent and review designs in accordance with LEED guidelines.
- Commissioning agents contribute to LEED projects by reviewing design plans, providing commissioning services, ensuring equipment and systems function at their intended efficiency level, scheduling site visits and tests throughout the construction cycle, and modifying control programs to enhance occupant comfort, reduce energy consumption, and increase operational efficiency.



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WHICH LEED CREDENTIAL DOES A COMMISSIONING AGENT NEED?

- To earn a LEED credential, professionals must pass the LEED Green Associate examination.
- Specializations like LEED AP BD+C and LEED AP O+M align with the values and services a commissioning agent contributes to LEED projects.
- Existing versus newly constructed structures are the only distinction.
- LEED AP specialty credentials can add extra points to projects, as commissioning agents frequently work on LEED projects.
- LEED Certification is based on project points, making it a no-brainer to have a LEED AP BD+C or LEED AP O+M working on a LEED BD+C or LEED O+M project.



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BENEFITS OF LEED COMMISSIONING

BENEFITS OF LEED COMMISSIONING +

- The commissioning agent can help identify energy conservation measures (ECMs) for a building, identifying any systems that have not been optimally programmed for the building's intended use.
- Early identification can help avoid unanticipated energy costs in the future.
- Seasonal or occupancy-related fluctuations can affect the building's operations, and the agent can provide a second opinion on how these modifications may affect MEP equipment.
- This can help create a plan to lower energy costs and reduce maintenance expenses.



BENEFITS OF LEED COMMISSIONING +

- Timing the project in accordance with energy requirements is a priority, but once the building is occupied, MEP systems may not be utilized as anticipated.
- The agent can assist in identifying systems that would benefit from upgrades or retrofits, which may be eligible for rebates from the local utility.
- Lastly, the commissioning agent may interview tenants and maintenance personnel about any issues they have with current building operations or desired improvements.
- A delicate balance must be maintained between maintaining comfort within the building and maximizing energy efficiency and minimizing operating expenses.



WHY IT'S WORTH IT

- Commissioning is a crucial process that increases energy efficiency and occupant productivity in both new and existing buildings.
- Early inclusion of O&M and ongoing documentation are advantageous for O&M personnel, generating superior manuals and training.
- Once the building is handed over to the owner, O&M personnel are better equipped to maintain system efficiency.
- The commissioning procedure results in improved lighting, air quality, building pressure, and temperature control, enhancing indoor environmental quality.
- Organizations recognize commissioning as an investment in risk management, increasing energy efficiency.
- Incentives from utilities and insurance companies encourage property owners to use commissioning, and green certifications may include commissioning as a requirement for qualification.

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COMMISSIONING LEED GREEN BUILDINGS

Commissioning LEED Green Buildings is an introductory course in commissioning (Cx), and it covers the fundamental concepts of green building science as well as the technique for commissioning new buildings. It is not necessary for you to have any prior experience or understanding of the commissioning process.

https://learn.beyondsmartcities.in/courses/leed-commissioning/

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