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BUILDING COMMISSIONING PROFESSIONAL
CBCP OVERVIEW
ONLINE TRAINING BY KRISHNAJI PAWAR
LEED AP(BD+C),GSAS CGP,GCP,ISO 14001
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MODULE 6+

Costs, benefits, emerging issues, and commissioning challenges

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CBCP OVERVIEW

In the past decade, researchers have studied Cx deployment scaling, the transition from HVAC-related gains to other system types, and the costs and advantages of Multi-Body Cx (MBCx) compared to EBCx, using more advanced analytics techniques.

Learning Objectives

- Course Overview and Introduction
- Definition and History of Building Commissioning
- Why is building commissioning needed?
- Building Commissioning Process Overview
- Professional Certification in Commissioning
- Cost and benefits of building commissioning
- Summary and Resources
- CBCP Sample Exam Question

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INTRODUCTION

- How scaling of Cx deployment due to codes, standards, utility EBCx programs, and market factors affects costs and benefits.
- Is Cx still dominated by HVAC-related operational improvements? Has there been a shift towards other system types?
- What data are available on the relative costs and benefits of Multi-Boundary Construction (MBCx) compared to Energy-Based Construction (EBCx)?



COMMISSIONING CHALLENGES AND EMERGING ISSUES

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CODE APPLICATIONS FOR COMMISSIONING





- Local and national energy codes and green codes now require commissioning and specific documentation.
- These requirements should be analyzed during pre-design and integrated into the OPR and commissioning processes.

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INCREASING BUILDING AND CONSTRUCTION TECHNOLOGIES

- The design and construction of buildings and systems have become increasingly complex, making the OPR process critical.
- The complexity of these systems increases the technical specifications in the OPR and the commissioning process.





BUILDING PERFORMANCE REPORTING



- Legislation and market demand for measuring and reporting facility resource efficiency have made the design, construction, and performance measurement of high-efficiency building systems increasingly important.
- Certification programs often require OPR and commissioning documentation for verification and credits.

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INTEGRATION OF HEALTH REQUIREMENTS WITH ENERGY AND SUSTAINABILITY

- Numerous sustainability, green building, and health-related programs for buildings and occupied spaces have been established, promoted, and mandated.
- Some directly require commissioning, while most are sufficiently complex that they require building system performance and reporting.





INTEGRATING CX INTO BUILDING OPERATIONS



The design, construction, and commissioning of facilities directly affect the performance of the facility and its systems for the life of the building.

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INTEGRATING AI INTO FAULT DEFECT AND DIAGNOSTIC (FDD) AND OPERATIONS

The introduction of AI automation and analytics into fault detection and diagnostic (FDD) systems is opening the door to allowing building systems to make minor system adjustments on their own.





OWNER VERSUS BUILDING USER



Many projects are core-and-shell made ready for a "tenant," with requirements that are greater than the original design concept.

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ADVANCED TRAINING FOR OPERATIONS AND MAINTENANCE PERSONNEL

As technical and technology-based building commissioning and regulatory requirements depend increasingly on data analytics, facility staff will require new knowledge, skills, and abilities.



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