BIM Project Management: Mastering Digital Construction

19 – 23 September 2027
Riyadh (KSA)



BIM Project Management: Mastering Digital Construction

Ref: 322509_236092 **Date:** 19 – 23 September 2027 **Location:** Riyadh (KSA) **Fees:** 4200 GBP

Why This Course

Building Information Modeling has become a key driver of digital transformation in construction and infrastructure projects. For project managers, BIM is not only a design tool; it is a powerful approach for improving planning, coordination, communication, cost control, scheduling, risk reduction, and decision-making across the project lifecycle.

This intensive 1-week BIM for Project Managers Training program equips participants with practical knowledge and tools to manage BIM-enabled projects effectively. The course covers BIM fundamentals, ISO 19650 standards, BIM implementation strategies, BIM Execution Plans, information requirements, model coordination, clash detection, 4D scheduling, 5D cost estimation, Common Data Environments, stakeholder collaboration, facility management, sustainability, and emerging technologies. Through practical exercises and case studies, participants will learn how to use BIM to improve project delivery and collaboration in the digital construction era.

What You'll Learn and Practice

By joining this program, you will:

- Understand BIM concepts, terminology, and project management applications.
- Explore BIM standards and protocols, including ISO 19650.
- Identify BIM benefits for planning, execution, coordination, and control.
- Develop BIM implementation strategies for construction projects.
- Create and manage BIM Execution Plans.
- Define BIM roles, responsibilities, and information requirements.
- Understand Level of Development and Level of Information requirements.
- Use BIM-based project planning techniques.
- Explore BIM software tools, 3D modeling, and visualization methods.
- Apply clash detection and model coordination techniques.
- Use 4D scheduling and 5D cost estimation concepts.
- Manage collaboration through Common Data Environments.
- Apply BIM for facility management, sustainability, and advanced digital construction practices.



The Program Flow

Day 1: Introduction to BIM for Project Managers

- Understand BIM fundamentals and key terminology.
- Explore the role of BIM in modern project management.
- Review BIM standards and protocols, including ISO 19650.
- Identify the benefits of BIM for cost, schedule, quality, and coordination.
- Develop practical BIM implementation strategies for construction projects.

Day 2: BIM Planning and Execution

- Develop BIM Execution Plans for project delivery.
- Define BIM roles, responsibilities, and accountability structures.
- Identify project information requirements and exchange needs.
- Understand LOD and LOI concepts and their impact on project coordination.
- Apply BIM-based project planning techniques across project phases.

Day 3: BIM Tools and Technologies

- Explore popular BIM software and digital construction tools.
- Understand 3D modeling and visualization techniques.
- Apply clash detection and coordination workflows.
- Use BIM to identify conflicts before construction.
- Explore 4D scheduling and 5D cost estimation for better planning and control.

Day 4: BIM-Based Collaboration and Communication

- Understand Common Data Environments and their role in project collaboration.
- Manage information exchange and interoperability between project teams.
- Apply BIM-based reporting and documentation practices.
- Improve stakeholder engagement using model-based communication.
- Support clearer decision-making through shared project information.

Day 5: Advanced BIM Applications

- Explore BIM applications in facility management and operations.
- Use BIM to support asset information management after project handover.
- Apply sustainability analysis using BIM-based information.
- Explore emerging technologies such as AR, VR, and IoT in BIM environments.
- Review case studies and best practices for successful BIM implementation.



Individual Impact

- Build confidence in managing BIM-enabled construction projects.
- Strengthen understanding of BIM standards, workflows, and project requirements.
- Improve ability to coordinate teams using BIM tools and shared data.
- Gain practical knowledge of 4D scheduling, 5D cost estimation, and clash detection.
- Develop stronger capability in digital project management and stakeholder communication.

Work Impact

- Improve project coordination and reduce design and construction conflicts.
- Strengthen collaboration between clients, consultants, contractors, and facility teams.
- Support better schedule and cost control through BIM-based planning.
- Improve documentation, reporting, and information management.
- Enhance project value through BIM-enabled sustainability, facility management, and digital handover.

Training Methodology

This program combines BIM concepts with practical project management application through:

- BIM implementation and ISO 19650 case discussions.
- BIM Execution Plan development exercises.
- Information requirements, LOD, and LOI workshops.
- Clash detection and coordination workflow activities.
- 4D scheduling and 5D cost estimation practice scenarios.
- Common Data Environment and stakeholder collaboration exercises.
- Facility management, sustainability, and emerging technology case studies.

Beyond the Course

Upon completion, participants will be able to:

- Develop comprehensive BIM Execution Plans.
- Implement BIM strategies across construction project lifecycles.
- Use BIM for improved coordination, communication, and clash detection.
- Apply BIM-based scheduling and cost estimation techniques.
- Manage project information through Common Data Environments.
- Support BIM-driven collaboration, sustainability, and facility management practices.

