Advanced BIM Management Training Course

Professional Development Training Course Outline

Category	Construction Institute	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Building Information Modelling (BIM) has transformed the Architecture, Engineering, Construction, and Operations (AECO) industry by enabling intelligent digital collaboration, data-driven decision-making, and lifecycle asset management. As governments, infrastructure developers, and private organisations increasingly mandate BIM standards such as ISO 19650, there is a growing demand for professionals capable of managing complex BIM workflows, Common Data Environments (CDE), digital twins, cloud collaboration, clash detection, 4D scheduling, 5D cost management, and BIM governance. Advanced BIM Management Training Course equips professionals with the latest methodologies, international standards, and practical implementation strategies required to lead BIM transformation projects across multidisciplinary teams.

This advanced programme combines strategic BIM management principles with practical implementation using industry-leading technologies and real-world case studies. Participants will gain expertise in BIM Execution Planning (BEP), information management, BIM coordination, interoperability, sustainability integration, digital construction, asset information management, AI-enabled BIM workflows, and digital twin technologies. The course prepares professionals to improve project delivery, reduce construction risks, optimise costs, enhance collaboration, and drive digital transformation within modern construction organisations.

Programme Curriculum

Advanced BIM Management Training Course

Introduction

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Course Duration

10 days

Course Objectives

Upon completion of this course, participants will be able to:

1. Master Advanced BIM Management strategies for large-scale construction projects.
2. Develop and implement ISO 19650-compliant BIM Execution Plans (BEPs).
3. Lead Digital Construction Transformation initiatives across organisations.
4. Manage Common Data Environments (CDE) for secure information exchange.
5. Integrate Digital Twin Technology into facility lifecycle management.
6. Apply AI-powered BIM Automation for enhanced productivity.
7. Conduct advanced Clash Detection and Model Coordination.
8. Implement 4D Construction Scheduling and project simulation.
9. Manage 5D BIM Cost Estimation and Quantity Take-Off processes.
10. Integrate Sustainable BIM for green building and ESG compliance.
11. Optimise Asset Information Management (AIM) for facility operations.
12. Strengthen BIM Governance, Risk Management, and Compliance.
13. Develop enterprise-wide BIM Implementation Roadmaps for digital excellence.

Target Audience

- BIM Managers
- BIM Coordinators
- Project Managers
- Architects
- Civil, Structural and MEP Engineers
- Construction Managers
- Facility and Asset Managers
- Digital Engineering and Infrastructure Professionals

Course Modules

Module 1: Advanced BIM Fundamentals

- BIM maturity levels
- BIM dimensions

- BIM lifecycle management
- BIM adoption strategies
- Global BIM standards
- **Case Study:** Enterprise BIM implementation for a mega infrastructure project.

Module 2: ISO 19650 Information Management

- ISO 19650 framework
- Information requirements
- Information delivery planning
- Naming conventions
- Information quality assurance
- **Case Study:** Implementing ISO 19650 across a multinational engineering firm.

Module 3: BIM Execution Planning (BEP)

- BEP development
- BIM goals
- Roles and responsibilities
- Model responsibilities
- BIM workflows
- **Case Study:** Developing a BIM Execution Plan for a hospital project.

Module 4: Common Data Environment (CDE)

- CDE architecture
- Document control
- Cloud collaboration
- Version management
- Data security
- **Case Study:** Cloud-based BIM collaboration on an airport expansion.

Module 5: BIM Coordination & Clash Detection

- Model federation
- Clash detection workflows
- Coordination meetings
- Issue tracking
- Model validation
- **Case Study:** Resolving multidisciplinary clashes in a commercial tower.

Module 6: 4D BIM Construction Planning

- Construction sequencing
- Project simulation
- Schedule integration
- Resource planning
- Site logistics
- **Case Study:** 4D BIM scheduling for a railway project.

Module 7: 5D BIM Cost Management

- Quantity take-off
- Cost estimation
- Cost forecasting
- Budget management
- Value engineering
- **Case Study:** Cost optimisation using 5D BIM.

Module 8: Digital Twin Technology

- Digital twin concepts
- IoT integration
- Real-time monitoring
- Predictive maintenance
- Smart asset management
- **Case Study:** Digital twin implementation for a smart hospital.

Module 9: BIM for Sustainable Construction

- Green BIM
- Energy analysis
- Carbon assessment
- LEED integration
- ESG reporting
- **Case Study:** Sustainable BIM for a net-zero office building.

Module 10: BIM for Facility Management

- Asset Information Models
- Operations and maintenance
- Space management
- Lifecycle asset management
- Maintenance planning
- **Case Study:** BIM-enabled facilities management for a university campus.

Module 11: AI and Automation in BIM

- AI-assisted modelling
- Machine learning applications
- Automated quality checks
- BIM analytics
- Generative design
- **Case Study:** AI-driven BIM automation for design optimisation.

Module 12: BIM Governance & Risk Management

- BIM governance framework
- Contract management
- Legal considerations
- Risk assessment
- Compliance monitoring
- **Case Study:** BIM governance in a public infrastructure programme.

Module 13: Enterprise BIM Implementation

- Digital transformation strategy
- Change management
- BIM capability assessment
- Organisational readiness
- Performance measurement
- **Case Study:** Enterprise-wide BIM transformation for a global contractor.

Module 14: Emerging Technologies in BIM

- Cloud BIM
- Extended Reality (XR)
- Virtual Reality (VR)
- Augmented Reality (AR)
- Blockchain for construction
- **Case Study:** XR-enabled BIM coordination for complex industrial projects.

Module 15: Capstone BIM Management Project

- Enterprise BIM strategy development
- Integrated project delivery
- Team collaboration
- Executive presentation
- Performance evaluation
- **Case Study:** End-to-end BIM management for a smart city development.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com