BIM Execution Planning (BEP) Training Course

Professional Development Training Course Outline

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

Course Introduction

Building Information Modeling is transforming the architecture, engineering, and construction industry by enabling data-driven collaboration, digital workflows, and lifecycle asset intelligence. A well-structured BIM Execution Plan (BEP) is the backbone of successful BIM adoption, ensuring standardization, interoperability, information governance, and project efficiency across multidisciplinary teams. BIM Execution Planning (BEP) Training Course is designed to equip professionals with cutting-edge BIM strategies, ISO 19650 compliance, Common Data Environment (CDE) workflows, and digital twin integration, enabling seamless coordination from design to facility management.

In today's fast-evolving AEC landscape, organizations demand high-performance BIM leadership, automation, cloud collaboration, and sustainable design practices. This BEP training delivers practical insights into BIM standards, clash detection, model validation, 4D/5D simulation, and risk mitigation strategies, empowering participants to drive innovation, cost optimization, and project delivery excellence. Through real-world case studies, hands-on exercises, and industry best practices, learners will master how to develop and implement a robust BEP aligned with global standards and emerging technologies.

Programme Curriculum

BIM Execution Planning (BEP) Training Course

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Course Objectives

1. Develop ISO 19650-compliant BIM Execution Plans for global projects
2. Master Common Data Environment (CDE) workflows for seamless collaboration
3. Implement data governance and information management strategies
4. Enhance multidisciplinary coordination and clash detection
5. Apply 4D scheduling and 5D cost estimation techniques
6. Integrate digital twin and smart asset management concepts
7. Optimize BIM workflows using automation and AI tools
8. Ensure interoperability using open BIM standards (IFC, COBie)
9. Strengthen risk management and quality assurance processes
10. Drive sustainable design and green building practices
11. Improve stakeholder communication and BIM leadership skills
12. Utilize cloud-based BIM collaboration platforms
13. Achieve efficient project delivery and lifecycle management

Target Audience

1. BIM Managers & Coordinators
2. Architects & Urban Designers
3. Civil, Structural & MEP Engineers
4. Project Managers & Construction Managers
5. Facility & Asset Managers
6. Contractors & Subcontractors
7. Digital Transformation & Innovation Leaders
8. Students & AEC Professionals transitioning to BIM

Course Modules

Module 1: Introduction to BIM & BEP

- BIM fundamentals and evolution
- BEP purpose and structure
- Key BIM standards overview
- Roles and responsibilities
- Benefits of BEP
- **Case Study:** Implementation of BIM in large-scale infrastructure project

Module 2: BIM Standards & ISO 19650

- ISO 19650 framework
- Information management principles
- Naming conventions
- Documentation standards
- Compliance strategies
- **Case Study:** ISO 19650 adoption in international projects

Module 3: Common Data Environment (CDE)

- CDE concepts and tools
- Data sharing workflows
- Version control
- Security and access control
- Collaboration platforms
- **Case Study:** Cloud-based CDE in mega construction project

Module 4: BEP Development Process

- Pre-contract vs post-contract BEP
- BEP templates
- Stakeholder inputs
- Execution strategies
- Approval workflows
- **Case Study:** BEP creation for commercial building

Module 5: Roles & Responsibilities in BIM

- BIM manager duties
- Coordination roles
- Information delivery roles
- Organizational structure
- Responsibility matrix
- **Case Study:** Team coordination in complex projects

Module 6: Information Management & Data Exchange

- Data exchange formats (IFC, COBie)
- Data validation
- Information requirements
- Model sharing
- Data lifecycle
- **Case Study:** Data interoperability challenges

Module 7: BIM Modeling Standards

- Modeling guidelines
- LOD (Level of Development)
- Naming conventions
- Quality control
- Model structuring

- **Case Study:** Standardization in multi-disciplinary models

Module 8: Clash Detection & Coordination

- Clash detection tools
- Coordination workflows
- Issue tracking
- Reporting systems
- Resolution strategies
- **Case Study:** Clash resolution in high-rise building

Module 9: 4D BIM (Time Management)

- Construction sequencing
- Scheduling tools
- Simulation workflows
- Time optimization
- Risk reduction
- **Case Study:** 4D simulation in infrastructure projects

Module 10: 5D BIM (Cost Management)

- Cost estimation
- Quantity take-offs
- Budget control
- Cost optimization
- Financial reporting
- **Case Study:** Cost savings using 5D BIM

Module 11: Digital Twin Integration

- Digital twin concepts
- Real-time data integration
- Asset lifecycle management
- Smart building systems
- IoT integration
- **Case Study:** Smart city digital twin implementation

Module 12: BIM for Sustainability

- Green building standards
- Energy analysis
- Lifecycle assessment
- Carbon footprint reduction
- Sustainable materials
- **Case Study:** LEED-certified BIM project

Module 13: Risk Management & QA/QC

- Risk identification
- Quality assurance processes
- Model validation

- Compliance checks
- Audit procedures
- **Case Study:** Risk mitigation in BIM projects

Module 14: BIM Automation & AI

- Automation tools
- AI-driven workflows
- Scripting (Dynamo, Python)
- Productivity enhancement
- Future trends
- **Case Study:** AI-based design optimization

Module 15: BEP Implementation & Project Delivery

- BEP execution strategies
- Monitoring and evaluation
- KPIs and performance metrics
- Continuous improvement
- Project close-out
- **Case Study:** Successful BIM project delivery

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

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