Training course on Digital Project Delivery and Management

Professional Development Training Course Outline

Category	Civil Engineering and Infrastructure Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The Architecture, Engineering, and Construction (AEC) industry is undergoing a profound global shift towards comprehensive digitalization, a transformation driven by the escalating complexity of projects, an insistent demand for greater efficiency, and the critical need for enhanced collaboration across all phases. Traditional paper-based and fragmented project delivery methods are increasingly proving inadequate, frequently resulting in pervasive inefficiencies, significant cost overruns, unavoidable delays, and critical communication breakdowns. In this evolving landscape, Digital Project Delivery and Management presents a truly transformative approach. By strategically leveraging advanced technologies and seamlessly integrated workflows, it actively streamlines processes, drastically improves data flow, significantly enhances decision-making capabilities, and ultimately ensures projects are delivered more effectively, predictably, and sustainably throughout their entire lifecycle. Training Course on Digital Project Delivery and Management is meticulously designed to provide participants with the practical application of cutting-edge digital tools, robust platforms, and innovative methodologies for managing projects comprehensively, from initial conception through final handover and ongoing operations. The curriculum will encompass a deep understanding of Building Information Modeling (BIM) as a foundational digital backbone, an exploration of advanced Common Data Environments (CDEs) for seamless information exchange, and mastery of sophisticated digital collaboration tools. Participants will also learn to implement powerful data analytics for performance monitoring and leverage rapidly emerging technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), and digital twins. Through a balanced blend of essential theoretical foundations, extensive hands-on exercises, and practical project-based learning, this course will comprehensively prepare attendees to confidently lead and effectively manage projects within the dynamic and continuously evolving digital landscape of the AEC sector.

Programme Curriculum

Training Course on Digital Project Delivery and Management

Introduction

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Course Objectives

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

1. Analyze the fundamental concepts of Digital Project Delivery and Management and its impact on the AEC industry.
2. Comprehend the principles of Building Information Modeling (BIM) as a central component of digital project workflows.
3. Master the use of Common Data Environments (CDEs) for effective information management and collaboration.
4. Develop expertise in leveraging digital tools for project planning, scheduling, and progress monitoring.
5. Formulate strategies for implementing digital collaboration platforms and communication protocols.
6. Understand the critical role of data analytics and performance dashboards in digital project control.
7. Implement robust approaches to digital quality assurance, safety management, and risk mitigation.
8. Explore key strategies for digital handover processes and integration with asset management systems.
9. Apply methodologies for managing supply chains and logistics in a digital environment.
10. Understand the importance of cybersecurity and data governance in digital project delivery.
11. Develop preliminary skills in utilizing emerging technologies (e.g., IoT, AI, VR/AR, Digital Twins) for project enhancement.
12. Design a digital execution plan for a given construction project scenario.
13. Examine global best practices and future trends in digital project delivery, smart construction, and industry transformation.

Target Audience

This course is ideal for professionals involved in project management, construction, and related fields:

1. Project Managers: Seeking to lead and implement digital transformation in projects.
2. Construction Managers: Aiming to optimize site operations through digital tools.
3. BIM Managers & Coordinators: Enhancing their role in digital project workflows.
4. Engineers & Architects: Leveraging digital tools for integrated design and delivery.
5. Digital Transformation Leads: Driving technology adoption in AEC firms.
6. Site Supervisors & Foremen: Implementing digital solutions in daily operations.
7. IT/IS Professionals: Supporting digital infrastructure for project teams.
8. Consultants & Advisors: Guiding clients on digital project delivery strategies.

Course Duration: 5 Days

Course Modules

- **Module 1: Foundations of Digital Project Delivery**
  - Define Digital Project Delivery (DPD) and its drivers in the AEC industry.
  - Discuss the challenges of traditional project management and how DPD addresses them.
  - Understand the strategic benefits of digitalization: efficiency, cost-saving, quality, safety.
  - Explore key concepts: BIM, CDE, digital workflows, data-driven decision-making.
  - Identify the roadmap for digital transformation in project organizations.
- **Module 2: Building Information Modeling (BIM) for Project Management**
  - Comprehend BIM as the backbone of digital project delivery.
  - Learn about BIM uses across the project lifecycle: design, coordination, quantity takeoff, construction.
  - Master techniques for utilizing BIM for clash detection and constructability analysis.
  - Discuss BIM Execution Plans (BEPs) and BIM protocols.
  - Apply BIM data for progress monitoring and reporting.
- **Module 3: Common Data Environments (CDEs) and Information Management**
  - Develop expertise in establishing and managing Common Data Environments (CDEs).
  - Learn about ISO 19650 standards for information management in CDEs.
  - Master techniques for document control, versioning, and approval workflows in CDEs.
  - Discuss information security and access control within CDE platforms.
  - Explore CDE integration with other project management software.
- **Module 4: Digital Collaboration and Communication**
  - Formulate strategies for implementing effective digital collaboration tools and platforms.
  - Understand the principles of transparent and real-time communication in digital projects.
  - Explore techniques for conducting digital design reviews, meetings, and issue tracking.
  - Discuss mobile solutions for field teams and remote collaboration.
  - Apply digital communication protocols to enhance team productivity.
- **Module 5: Digital Planning, Scheduling, and Progress Monitoring**
  - Understand the critical role of digital tools in project planning and scheduling (e.g., 4D BIM).
  - Implement robust approaches to creating digital work breakdown structures (WBS) and activity sequencing.
  - Explore techniques for real-time progress tracking using site data, drones, and IoT sensors.
  - Discuss earned value management (EVM) and forecasting in a digital context.
  - Examine digital dashboards for project performance monitoring and reporting.
- **Module 6: Data Analytics for Project Control and Optimization**

    - Apply methodologies for collecting, analyzing, and visualizing project data.
    - Master techniques for identifying trends, patterns, and anomalies in project performance data.
    - Understand the use of predictive analytics for risk identification and mitigation.
    - Discuss key performance indicators (KPIs) and data-driven decision-making.
    - Explore business intelligence (BI) tools for project control dashboards.
- **Module 7: Emerging Technologies in Digital Project Delivery**
    - Explore key strategies for leveraging emerging technologies in project delivery.
    - Learn about the application of Artificial Intelligence (AI) and Machine Learning (ML) for automation and insights.
    - Discuss the role of Internet of Things (IoT) for real-time asset tracking and site monitoring.
    - Understand Virtual Reality (VR), Augmented Reality (AR) for immersive design review and training.
    - Examine the concept of Digital Twins for operations and maintenance integration.
- **Module 8: Digital Transformation, Implementation & Future Outlook**
    - Examine global best practices and successful case studies of digital project delivery.
    - Develop preliminary skills in assessing organizational readiness and planning for digital adoption.
    - Discuss change management, talent development, and overcoming implementation barriers.
    - Explore future trends: smart contracts, blockchain, robotics in construction.
    - Design a strategic roadmap for driving digital transformation within a project or organization.

Training Methodology

- **Interactive Workshops:** Facilitated discussions, group exercises, and problem-solving activities.
- **Case Studies:** Real-world examples to illustrate successful community-based surveillance practices.
- **Role-Playing and Simulations:** Practice engaging communities in surveillance activities.
- **Expert Presentations:** Insights from experienced public health professionals and community leaders.
- **Group Projects:** Collaborative development of community surveillance plans.
- **Action Planning:** Development of personalized action plans for implementing community-based surveillance.
- **Digital Tools and Resources:** Utilization of online platforms for collaboration and learning.
- **Peer-to-Peer Learning:** Sharing experiences and insights on community engagement.
- **Post-Training Support:** Access to online forums, mentorship, and continued learning resources.

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

- Participants must be conversant in English.
- Upon completion of training, participants will receive an Authorized Training Certificate.

- The course duration is flexible and can be modified to fit any number of days.
- Course fee includes facilitation, training materials, 2 coffee breaks, buffet lunch, and a Certificate upon successful completion.
- One-year post-training support, consultation, and coaching provided after the course.
- Payment should be made at least a week before the training commencement to Fineskill Training Center account, as indicated in the invoice, to enable better preparation.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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