

DIGITAL TRANSFORMATION IN CONSTRUCTION INDUSTRY

“Driving Productivity, Collaboration & Innovation Through Smart Technologies in Construction”

Schedule

Date	Venue	Fees (Face-to-Face)
07 - 11 Sep 2026	London, UK	USD 3495 per delegate

► Available delivery methods: Face-to-Face & Online Training

Introduction

The construction industry is undergoing a digital revolution, where traditional methods are being enhanced or replaced by advanced technologies such as Building Information Modeling (BIM), drones, IoT, AI, robotics, and cloud collaboration platforms. With pressure to improve timelines, quality, safety, and cost-efficiency, digital transformation has become an essential strategy for future-ready construction businesses.

This 5-day course equips professionals with the knowledge, tools, and frameworks to plan, lead, and manage digital transformation in construction projects and organizations. Participants will explore key technologies, implementation strategies, digital project workflows, and best practices for innovation adoption.

Objectives

By the end of this course, participants will be able to:

- Understand digital transformation trends in the global construction sector
- Identify and assess emerging technologies that impact construction workflows
- Apply BIM, digital twins, and cloud-based collaboration in project execution
- Develop a strategic roadmap for digital adoption and innovation
- Overcome change management, cost, and interoperability challenges

Why Attend

- To improve project productivity, predictability, and risk management using digital tools
- To gain a competitive edge by leading innovation in construction delivery
- To digitize critical construction workflows across design, planning, and execution
- To enhance stakeholder collaboration and real-time data visibility
- To align your organization with industry 4.0 and smart infrastructure trends

Target Audience

This program is designed for:

- Construction and project managers
- Engineers, architects, and BIM specialists
- IT and digital transformation officers in construction firms
- Contractors, developers, and infrastructure owners
- QS, planners, and professionals in public/private sector construction projects

Individual Benefits

Key competencies that will be developed include:

- BIM and digital construction technologies
- Digital project lifecycle management
- Cost-benefit analysis of construction tech investments
- Collaboration and document control in digital ecosystems
- Leadership in change and innovation

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Enhanced operational efficiency and data-driven decision-making
- Better collaboration and reduced rework through digital workflows
- Faster project delivery with improved resource planning
- Lower safety risks and lifecycle cost reduction
- Alignment with ESG, smart cities, and sustainability objectives

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings - Trends, policies, and transformation models in construction
- Case Studies - Real-world digital implementation successes and failures
- Workshops - BIM use cases, cloud tools, and project tech stack design
- Peer Exchange - Challenges and solutions in real project environments
- Tools - Roadmap templates, ROI calculators, and digital audit checklists

MAWA EVENTS

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Course Outline

Detailed 5-Day Course Outline

Training Hours: 7:30 AM - 3:30 PM Daily Format: 3-4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 - 02:00

Day 1: Understanding the Digital Shift in Construction

- Module 1: Digital Transformation Overview in the Built Environment (07:30 - 09:30) • Evolution of construction technologies • Global drivers: safety, sustainability, cost, compliance • Digital maturity and benchmarking
- Module 2: Smart Construction Ecosystems (09:45 - 11:15) • Industry 4.0 and construction 4.0 explained • Role of data and connectivity in modern projects • Ecosystem of stakeholders in digital delivery
- Module 3: Digital Readiness and Strategy Development (11:30 - 01:00) • Assessing organizational readiness • Critical success factors and barriers to transformation • Creating a digital vision and strategic alignment
- Module 4: Workshop - Digital Maturity Self-Assessment (02:00 - 03:30) • Use a diagnostic tool to assess current capabilities

Day 2: Technology Enablers in Construction Projects

- Module 1: Building Information Modeling (BIM) in Practice (07:30 - 09:30) • 3D, 4D, 5D BIM fundamentals • Model coordination and clash detection • Standards: ISO 19650 and common data environments
- Module 2: Digital Twins and IoT (09:45 - 11:15) • Digital representation of physical assets • Real-time data from sensors, systems, and equipment • Use in maintenance, handover, and lifecycle planning
- Module 3: Automation, Robotics, and Prefabrication (11:30 - 01:00) • Drones, 3D printing, robotic arms in construction • Modular construction and digital fabrication trends
- Module 4: Case Study - BIM and IoT Integration (02:00 - 03:30) • Explore combined applications in a real project

Day 3: Project Execution and Collaboration in Digital Environments

- Module 1: Digital Project Lifecycle Management (07:30 - 09:30) • End-to-end data flow from concept to closeout • Digital delivery methods and lean workflows
- Module 2: Cloud Collaboration Platforms (09:45 - 11:15) • Tools: Autodesk Construction Cloud, Procore, PlanGrid, Aconex • Managing documents, RFIs, issues, and change orders
- Module 3: Procurement and Contracting in Digital Projects (11:30 - 01:00) • E-Tendering, contract digitization, and data-driven KPIs • Collaborative contracting models and incentives
- Module 4: Workshop - Digital Workflow Simulation (02:00 - 03:30) • Simulate document sharing, tracking, and approvals online

Day 4: Data, Analytics, and Risk in Digital Construction

- Module 1: Construction Analytics and Dashboards (07:30 - 09:30) • Data capture and KPI tracking • Visualizing safety, cost, schedule, and quality metrics
- Module 2: Cybersecurity and Data Integrity (09:45 - 11:15) • Cyber threats in connected construction systems • Data ownership, privacy, and access controls
- Module 3: Risk Management in Digital Construction (11:30 - 01:00) • New risks vs. traditional risks • Mitigation strategies and contingency planning
- Module 4: Group Exercise - Data-Driven Decision Case (02:00 - 03:30) • Use dashboard data to recommend actions

Day 5: Planning the Digital Transformation Journey

- Module 1: ROI and Business Case for Construction Technology (07:30 - 09:30) • Cost-benefit analysis of major technology adoption • Identifying intangible and long-term gains
- Module 2: Change Management and Training (09:45 - 11:15) • Leading cultural change • Skilling the workforce for digital tools • Internal communication and engagement
- Module 3: Digital Transformation Roadmap (11:30 - 01:00) • Phased rollout plans and quick wins • Monitoring, governance, and performance reviews
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Module 4: Final Presentations and Certification (02:00 – 03:30) • Teams present a digital transformation strategy • Certificate awarding and closing

Certification

Participants will receive a Certificate of Completion in Digital Transformation in Construction Industry, confirming their readiness to lead and support digital innovation initiatives across the project lifecycle in the built environment.

Why Choose MAWA Events

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