

NEW MODERN TECHNOLOGIES FOR CONSTRUCTION PROJECTS USING NEW ADVANCED SYSTEMS

“Transforming Construction Through Innovation and Smart Technology.”

Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

Introduction

The construction industry is undergoing rapid transformation with the integration of advanced technologies that improve productivity, safety, quality, and sustainability. This course introduces participants to modern technologies such as Building Information Modeling (BIM), drones, IoT, 3D printing, robotics, AI, and smart project management systems. It focuses on how these innovations are practically applied to modern construction projects across sectors.

Objectives

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

- Identify emerging technologies transforming construction
- Understand the role of automation, digitization, and real-time data in site management
- Apply BIM and digital tools for improved collaboration and design accuracy
- Evaluate the benefits of technologies such as drones, sensors, and robotics
- Strategically plan tech integration into existing construction workflows

Why Attend

- Stay ahead with knowledge of cutting-edge tools reshaping construction
- Improve project accuracy, reduce waste, and boost safety
- Gain competitive advantage in bidding and executing high-value projects
- Learn real-world use cases and success stories from global projects

Target Audience

- Civil and Construction Engineers
- Project Managers and Planners
- Site Engineers and Supervisors
- BIM Managers and Coordinators
- Technology Implementation Teams in Construction Firms

Individual Benefits

- Develop strong skills in tech-enabled construction practices
- Enhance professional value in smart infrastructure projects
- Improve efficiency and decision-making through digital tools
- Lead innovation initiatives in construction organizations

Organizational Benefits

- Increase project profitability with modern systems
- Reduce rework and delays using predictive technology
- Enhance coordination between multidisciplinary teams
- Improve data-driven decision-making and reporting

Instructional Methodology

- Interactive presentations with videos of real-world applications
- Hands-on demonstrations of software and digital tools
- Group activities and scenario analysis
- Case study reviews and guided technology evaluation
- Participant discussion forums

Course Outline

DETAILED 5-DAY COURSE OUTLINE (Customizable) Training Hours: 07:30 AM – 03:30 PM Daily Format: 3–4 Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Overview of Modern Construction Technology

- Challenges of traditional construction vs. modern solutions
- Introduction to key technologies in smart construction
- Digital transformation roadmap
- Technology trends and global adoption statistics

Day 2: Building Information Modeling (BIM)

- BIM concepts, levels, and platforms
- BIM for design collaboration, clash detection, and project visualization
- Integration with project schedules and cost estimation
- Hands-on walkthrough: BIM environment demonstration

Day 3: Automation and Smart Equipment

- Robotics in excavation, masonry, and welding
- Drones for surveying, monitoring, and safety
- IoT sensors for structural health monitoring
- 3D printing in construction components

Day 4: Project Management Technologies

- AI and machine learning in project planning
- Digital twin technology
- Construction management software (Primavera, Procore, PlanGrid)
- Mobile apps and remote collaboration tools

Day 5: Implementation Strategy and Case Studies

- Technology adoption challenges and solutions
- Change management and training
- Case studies: smart cities, mega infrastructure projects
- Group exercise: Plan tech integration for a sample project

Certification

Participants will receive a Certificate of Completion: “Modern Construction Technologies Using Advanced Systems”

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
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- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

In-House / Customized Training

Interested in running this course for your team?

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