Intelligent Systems and Smart Construction

Venue Information

Venue: London UK

Place:

Start Date: 2026-09-08

End Date: 2026-09-12

Course Details

Net Fee: £4750.00

Duration: 1 Week

Category ID: CACETC

Course Code: CACETC-83

Syllabus

Learning Objectives

- Understand how AI is embedded into hardware systems and site operations.

- Study real-world applications such as drones, robots, and IoT systems.

- Learn how smart systems improve safety, quality, and productivity.

- Evaluate practical implementation of digital twins and automation.

Target Audience

Site managers, automation specialists, project engineers, and safety officers interested in high-tech construction applications.

Prerequisites

Familiarity with construction project workflows and digital tools is beneficial.

Daily Course Breakdown

Day 1

Study the integration of robotics and AI on construction sites. Explore how computer vision enhances automation in physical construction tasks.

Day 2

Delve into the role of drones, photogrammetry, and IoT in enabling smart monitoring and real-time construction intelligence.

Day 3

Understand how predictive maintenance is powered by AI, and how intelligent scheduling systems are optimizing resource allocation.

Day 4

Explore safety and quality control enhancements using AI tools. Discover how digital twin technology provides continuous project visibility.

Day 5

Analyze the fusion of AI with Building Information Modeling (BIM) and Geographic Information Systems (GIS), and learn the key challenges of deploying such integrations.