



DIGITAL INNOVATION AND TRANSFORMATION

Artificial Intelligence (AI) in Real Estate Development and Facilities

Course code: DIT-019

SPARK TRAINING

Professional training courses for leaders, specialists, and organizations seeking practical capability development.

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— Workshop Overview

Artificial intelligence is creating new opportunities across the real estate lifecycle, from development feasibility and investment analysis to building operations, maintenance, energy management, tenant experience, and portfolio decision-making. The challenge for real estate and facilities professionals is determining where AI can deliver measurable value and how it can be integrated with existing property data, building systems, and management processes. This Artificial Intelligence (AI) in Real Estate Development and Facilities course provides a practical business and operational perspective on applying AI, machine learning, generative AI, predictive analytics, computer vision, digital twins, and intelligent building technologies. Participants explore how AI can support site and development analysis, property portfolio management, predictive maintenance, space utilization, energy optimization, facilities management, and tenant services while addressing data quality, privacy, cybersecurity, governance, and implementation risks.

Why Attend

The programme combines instructor-led sessions, demonstrations, real estate and facilities case studies, AI-assisted analysis exercises, building operations scenarios, group workshops, and implementation planning. Participants examine practical applications across the property lifecycle and develop an AI use-case portfolio based on

Who Should Attend

Real estate development managers
Property and asset managers
Facilities managers
Real estate investment professionals
Building operations managers
Property portfolio managers
Workplace and space management professionals

— Learning Objectives

- Understand the role of AI across real estate development, property management, and facilities management
- Identify high-value AI applications across the real estate and building lifecycle
- Apply AI-assisted analysis to development feasibility and property decision-making
- Understand predictive maintenance and intelligent asset management applications
- Use occupancy and space data to support workplace and portfolio optimization
- Evaluate AI opportunities for building energy and operational efficiency
- Understand the role of IoT, building management systems, digital twins, and computer vision in intelligent facilities
- Apply generative AI to facilities, property, and management workflows

- Evaluate data, privacy, cybersecurity, governance, and implementation risks
- Develop an actionable AI roadmap for real estate and facilities operations

Course Outline

**DAY
1**

AI Applications Across the Real Estate and Facilities Lifecycle

- Understanding artificial intelligence, machine learning, generative AI, predictive analytics, and computer vision in a property context
- Mapping AI opportunities across real estate development, investment, asset management, property management, and facilities operations
- Identifying data sources including property systems, maintenance records, BMS, IoT sensors, occupancy systems, financial data, and external market information
- Understanding how AI converts property and operational data into predictions, recommendations, automation, and decision support
- Evaluating AI use cases according to business value, data availability, implementation complexity, operational impact, and risk
- Practical exercise: Building an AI opportunity map for a real estate portfolio or facilities management operation

**DAY
2**

AI for Real Estate Development, Investment and Portfolio Decisions

- Applying AI-assisted research to market analysis, location assessment, property demand, and development opportunities
- Using predictive analytics and scenario modelling to support feasibility studies and development planning
- Applying AI to property portfolio analysis, asset performance monitoring, and investment decision support
- Using generative AI to analyze development documents, reports, proposals, contracts, and project information
- Exploring AI applications in construction progress monitoring, project risk identification, cost information, and development reporting
- Case study: Evaluating a real estate development opportunity using AI-supported market, financial, operational, and risk information

**DAY
3**

Predictive Maintenance and Intelligent Facilities Management

- Moving from reactive and preventive maintenance toward predictive and condition-based maintenance strategies
- Using equipment history, sensor data, alarms, work orders, and failure patterns to identify maintenance requirements
- Understanding AI applications for HVAC, electrical systems, lifts, pumps, and other critical building assets
- Connecting AI analytics with Computerized Maintenance Management Systems (CMMS) and facilities management workflows

- Applying generative AI to maintenance records, work-order summaries, troubleshooting knowledge, and facilities documentation
- Practical workshop: Designing an AI-enabled predictive maintenance workflow for critical building equipment

DAY
4

Smart Buildings, Energy Optimization and Occupant Experience

- Integrating AI with Building Management Systems (BMS), IoT devices, smart meters, sensors, and connected building infrastructure
- Using occupancy analytics to improve space utilization, workplace planning, cleaning schedules, and building services

- Applying AI to energy consumption analysis, HVAC optimization, demand patterns, and building performance improvement
- Understanding digital twins and their role in monitoring, simulation, asset information, and facilities decision-making
- Exploring computer vision and intelligent monitoring applications while considering privacy and appropriate controls
- Case study: Developing an AI-supported smart building strategy for energy efficiency, space utilization, and occupant experience

DAY

5

AI Governance and Implementation for Real Estate and Facilities

- Assessing data quality, interoperability, system integration, and information ownership before implementing AI solutions
- Managing privacy, cybersecurity, access controls, sensitive building information, and third-party technology risks
- Evaluating AI vendors and solutions based on business requirements, integration capability, scalability, transparency, and total cost
- Establishing human oversight and validation for AI-generated predictions, recommendations, and operational decisions
- Measuring AI performance through maintenance cost, downtime, energy consumption, space utilization, service response, tenant experience, and return on investment
- Capstone exercise: Developing an AI Implementation Roadmap for Real Estate Development and Facilities covering priority use cases, required data, technology integration, governance, KPIs, and expected business value

— Upcoming Classroom Dates

DATE	LOCATION	FEE
12 - 16 October 2026	Munich - Germany	€1,725
9 - 13 November 2026	Amsterdam - Netherlands	€2,125
14 - 18 December 2026	Istanbul - Türkiye	€1,425
18 - 22 January 2027	Rome - Italy	€2,125
15 - 19 February 2027	Kuala Lumpur - Malaysia	€1,400
15 - 19 March 2027	Barcelona - Spain	€1,925
19 - 23 April 2027	London - United Kingdom	€2,100
17 - 21 May 2027	Geneva - Switzerland	€2,625

— Certificate and Registration

Participants who attend and complete the full programme receive a SPARK Training Certificate of Completion. For registration, in-house delivery, or availability questions, contact info@sparktraining.eu or +31 85 115 0004.