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COURSE BROCHURE

Advanced AI in Project Management Training Course

24 January – 4 February 2027
Cairo

Advanced AI in Project Management Training Course

Ref: 3_81 **Date:** 24 January – 4 February 2027 **Location:** Cairo **Fees:** 6500 GBP

Advanced AI in Project Management is a 2-week training course for project, programme and PMO leads that ends with an AI-enabled project controls blueprint for the portfolio. Schedules, cost reports and registers now produce more signals than any controller can read by hand, and statistical forecasting can turn them into earlier warnings of slippage and overspend. Jupiter Prime Training runs this course on AI in project management.

Why AI in Project Management Matters Now

Three pressures shape AI in project delivery: sponsors who expect earlier notice of overruns, portfolios that grow faster than PMO headcount, and clients who demand frequent, accurate progress reporting. A project office that applies forecasting with discipline predicts finish dates and final costs with more confidence and spends steering meetings on decisions rather than status chasing; one that applies it carelessly trusts unreliable forecasts and exposes confidential commercial information. The course rests on the PMBOK Guide from the Project Management Institute PMI, earned value management EVM, ISO 21502 guidance for projects and ISO/IEC 42001 for AI management systems.

Who Gains Most from AI in Project Management

- Those who deliver complex projects against fixed budgets, milestones and contract terms
- Those who run a project management office and set its scheduling and reporting standards
- Those who oversee programmes and portfolios and brief sponsors on progress
- Those who build baselines, cost estimates and earned value reports
- Those who identify, score and track threats to milestones and budgets

Project organisations gain most when a PMO lead, a senior project manager and a cost and schedule controller attend together and agree a single blueprint for the portfolio.

AI in Project Management Capabilities

Planners, controllers and PMO leads leave able to put forecasting models and language tools to work on live schedules and cost reports:

- Assess which project processes benefit most from forecasting models and language tools — for PMO investment choices
- Apply AI to activity durations, cost ranges and resource levelling — for planners and delivery managers
- Build predictive models for slippage, cost growth and exposure — for sponsors who need early warning
- Weigh record quality, confidentiality and bias in AI project tools — for information security and contract owners
- Calculate estimate at completion with statistical and formula methods side by side — for programme boards and finance
- Communicate a staged controls blueprint — for executive sign-off

Key AI in Project Management Terms

- Earned value management — a method that compares planned work, completed work and actual cost to measure project performance.
- Estimate at completion — the forecast final cost of a project, updated as work progresses and actual costs are recorded.
- Monte Carlo simulation — a technique that runs thousands of scenarios to estimate the likely range of finish dates or costs.
- Critical path — the longest chain of dependent activities, which sets the shortest possible project duration.
- Large language model — an AI model trained on large text collections that drafts, summarises and answers questions in natural language.
- Schedule performance index — the ratio of earned value to planned value, showing whether work is ahead of or behind the baseline.

AI in Project Management Day by Day

Day 1: AI Across the Project Lifecycle

- AI Techniques for Projects — Forecasting Models, Language Tools and Optimisation
- Process Group Mapping — Where AI Supports Initiating Through Closing
- Sponsor and Client Expectations — Faster Insight and Sharper Progress Reporting
- Opportunity Ranking — Scoring AI Uses by Benefit and Effort
- PMO Maturity Baseline — Records, Software and Skills Today

Day 2: Project Records as an Asset

- Records Inventory — Schedules, Cost Reports, Registers and Close-Out Files
- Cleansing Historical Records — Rules for Reliable Benchmarks
- Work Breakdown Structure Coding — Consistent Structures for Comparison
- Close-Out File Mining — Patterns from Completed Projects
- Commercial Confidentiality — Protecting Client and Contract Information

Day 3: AI-Assisted Scheduling

- Scope and WBS Drafting with Language Tools — Faster Initial Baselines
- Duration Prediction from History — Activity Estimates Grounded in Benchmarks
- Schedule Logic Checks — Detecting Open Ends, Loops and Constraints
- Critical Path Scenario Testing — Exploring Delays Before They Occur
- Monte Carlo Schedule Simulation — Confidence Levels for Completion Dates

Day 4: Estimating, Budgets and Resources

- Parametric and Analogous Estimating with AI — Cost Ranges from Benchmarks
- Contingency Modelling — Linking Exposure to Reserve Levels
- Resource Levelling Algorithms — Balancing Scarce Skills Across Projects
- Capacity Forecasting — Anticipating Portfolio Bottlenecks
- Estimate Challenge Sessions — Expert Scrutiny of Model Figures

Day 5: Predicting Threats to Milestones

- Threat Discovery with Language Tools — Scanning Contracts and Registers
- Likelihood Scoring Models — Probability from Project Signals
- Leading Indicators — Early Signs of Slippage and Overspend
- Issue Trend Examination — Recurring Problems Across the Portfolio
- Response Option Ranking — Choices Sorted for Sponsors

Day 6: Earned Value and Cost Tracking with AI

- EVM Index Automation — Cost and Schedule Performance Indices
- Estimate at Completion Forecasting — Statistical Models Versus Formula Methods
- Variance Narrative Drafting — Clear Explanations for Monthly Reports
- Change Request Impact Assessment — Effects on Scope, Time and Cost
- Control Account Health Checks — Flagging Accounts Needing Attention

Day 7: Generative AI for Project Documents

- Charter and Execution Baseline Drafting — Instruction Templates for Core Documents
- Progress Report Generation — Summaries Tailored to Sponsors and Clients
- Minutes and Action Logs — From Meeting Recordings to Owned Actions
- Stakeholder Message Sequencing — Tone, Timing and Channel Choices
- Instruction Template Library — Reusable Patterns and Quality Checks

Day 8: Portfolio Analytics and Board Dashboards

- Portfolio Health Scoring — Combining Schedule, Cost and Exposure Signals
- Benefits Realisation Tracking — Linking Projects to Business Outcomes
- Investment Prioritisation Models — Ranking Projects Under Funding Limits
- Board Dashboard Layout — Visuals for Executive Decisions
- Natural Language Portfolio Queries — Plain Questions Answered from Records

Day 9: Responsible AI in Project Delivery

- ISO/IEC 42001 Requirements — Policies and Roles for Project AI
- Forecast Accuracy Tracking — Checking Model Reliability Over Time
- Fairness in Resource Allocation — Protecting People Affected by Algorithms
- AI Software Procurement Questions — Security, Hosting and Contract Terms
- Accountability Matrix — Who Signs Off AI-Supported Decisions

Day 10: Assembling the Controls Blueprint

- Opportunity Shortlist Check — Applying Day One Ranking to Final Choices
- Trial Project Selection — Applying Scheduling and Threat Models on a Live Project
- Planner and Controller Role Changes — Preparing Staff for New Routines
- Benefit Tracking Measures — Applying Dashboards to Show Results
- Controls Blueprint Assembly — Completing the PMO's Staged Blueprint

Applying AI in Project Management After the Course

- Trial the schedule logic checks and leading indicators on a live project and compare the forecasts with the next monthly report.
- Brief sponsors and information security on the accountability matrix and board dashboard layout to agree sign-off rules.

AI in Project Management Questions FAQ

What is AI in project management, and why does it matter now?

AI in project management is the use of forecasting models, language tools and optimisation to plan, predict, track and report projects. It matters now because project records have outgrown manual reading, and AI gives earlier warning of slippage and overspend while freeing time for decisions.

Which roles gain most from advanced AI in project management training?

PMO leads, senior project and programme managers and cost and schedule controllers gain most from advanced AI in project management training. They own the methods, records and reports that AI changes, so attending together helps them apply a consistent approach across the portfolio.

How is an advanced AI in project management course different from a scheduling software course?

An advanced AI in project management course covers predictive models, generated documents, portfolio analytics and responsible use across the whole lifecycle. A scheduling software course teaches the features of a single planning tool without forecasting, threat prediction or AI accountability.

What does a participant bring back from AI in project management training?

A participant brings back a staged AI-enabled controls blueprint covering records, schedule checks, leading indicators, a monthly report template, instruction templates and a board dashboard. You can use it straight away to choose a trial project and assign accountability.

AI in Project Management: The Way Forward

The AI-enabled project controls blueprint gives the project office a single route for bringing forecasting models into delivery. The initial decision it informs is which live project trials the models. PMO leads, project managers and controllers use it together, and the forecast models are worth revisiting once their predictions can be compared with actual completion dates and costs.