

AI for Project Management (Open Source)

5 Days

DURATION

16

MODULES

56

TOPICS

24

HANDS-ON ACTIVITIES

LEARNING OBJECTIVES

- Differentiate AI use across Agile, Hybrid and Waterfall methods
- Recognise ethical risks such as bias, hallucinations and data leakage
- Design prompts for planning, reporting and stakeholder communication
- Apply ETS forecasting models to build AI-assisted roadmaps
- Build risk-informed dashboards using Monte Carlo simulation
- Map project workflows into automation flows with exception handling
- Set up live dashboards with anomaly alerts for execution metrics
- Develop AI adoption roadmaps and vendor evaluation checklists

16 Modules, 56 Topics

DAY 1 Foundations & Prompt Engineering

01

2 Activities

Introduction to AI in Project Management

LEARNING OBJECTIVES

- Define AI and its relevance in modern project management
- Differentiate AI applications across Agile, Hybrid, and Waterfall methodologies
- Identify areas where AI augments vs. replaces human decision-making.

02

3 Activities

Ethics, Governance, and KPIs

LEARNING OBJECTIVES

- Recognize ethical risks (bias, hallucinations, leakage)
- Define governance structures (RACI, oversight committees)
- Establish AI adoption KPIs and monitoring processes

03

2 Activities

Prompt Engineering Essentials

LEARNING OBJECTIVES

- Understand the mechanics of prompting and response tuning
- Design prompts for project planning, reporting, and stakeholder communication

Tools

TOOLS

Microsoft Copilot · Atlassian Intelligence · ChatGPT · Notion AI · Gemini

01

2 Activities

Planning & Estimation with AI

LEARNING OBJECTIVES

- Clean and structure historical project datasets
- Apply ETS (Exponential Smoothing) models for forecasting
- Create AI-assisted roadmaps with confidence intervals

02

3 Activities

Monte Carlo Risk Simulation

LEARNING OBJECTIVES

- Understand Monte Carlo methods for risk modeling
- Quantify schedule & cost uncertainties
- Build risk-informed executive dashboards

Tools

TOOLS

Primavera · Planview · Google Sheets (ETS) · Python (Monte Carlo packages)

01

2 Activities

Workflow Automation

LEARNING OBJECTIVES

- Map existing PM workflows into automation flows
- Incorporate human approvals and exception handling
- Build error-handling and fallback strategies

02

2 Activities

Real-Time Monitoring & Anomaly Detection

LEARNING OBJECTIVES

- Define key execution metrics (velocity, burndown, earned value)
- Set up live dashboards with anomaly alerts
- Use AI playbooks for automated incident response

Tools

TOOLS

Jira · ServiceNow · Zapier · n8n · Grafana · Power BI

DAY 4 Risk, Decision Support & NLP

01

2 Activities

Advanced Risk Management with AI

LEARNING OBJECTIVES

- Build risk taxonomies with AI assistance
- Apply Expected Monetary Value (EMV) and Bayesian updates
- Maintain dynamic risk registers

02

3 Activities

NLP for Project Management

LEARNING OBJECTIVES

- Summarize and structure project meetings automatically
- Build searchable knowledge bases with Retrieval-Augmented Generation (RAG)
- Apply process mining for bottleneck detection

Tools

TOOLS

ServiceNow Risk · SAP GRC · Whisper · LangChain · PM4Py

DAY 5 Implementation & Future Trends

01

2 Activities

AI Adoption in Organizations

LEARNING OBJECTIVES

- Define operating models (RACI, AI governance boards)
- Build procurement & vendor evaluation checklists
- Develop AI training & communication plans
- Design ROI measurement frameworks

Pitfalls & Capstone Project

LEARNING OBJECTIVES

- Identify and mitigate key risks (hallucinations, data leakage, model drift)
- Consolidate learning into a structured AI-Enhanced PM Playbook

Tools

TOOLS

Salesforce Einstein · Microsoft Copilot Studio · Hugging Face · GitHub Copilot

HANDS-ON ACTIVITIES

Practise What You Learn

#	MODULE	ACTIVITY
01	Introduction to AI in Project Management	■ AI in PM case study review (Agile vs. Waterfall). ■ Group discussion: Where can AI save time in your projects?
02	Ethics, Governance, and KPIs	■ Draft an AI Use Policy for PM teams ■ Bias-spotting simulation: detect hidden bias in AI project estimates ■ Build a KPI baseline for a sample project
03	Prompt Engineering Essentials	■ Iterative prompt-building exercises in ChatGPT / Copilot ■ Group challenge: Generate a project charter draft in < 3 prompts
01	Planning & Estimation with AI	■ Hands-on with Google Sheets ETS function ■ AI-assisted backlog estimation exercise
02	Monte Carlo Risk Simulation	■ Monte Carlo simulation in Python / Excel ■ Sensitivity analysis of project completion dates ■ Executive-style report drafting
01	Workflow Automation	■ Automation flow design in Zapier / n8n ■ Build “Auto-task creation” from Slack/Email to Jira
02	Real-Time Monitoring & Anomaly Detection	■ Create real-time Grafana dashboard for project KPIs ■ AI-triggered escalation workflow (ServiceNow / Jira)
01	Advanced Risk Management with AI	■ Case study: Updating risk probabilities after project delays ■ AI-assisted decision memo writing

#	MODULE	ACTIVITY
02	NLP for Project Management	- Whisper transcription + LangChain summarization - Build RAG-powered project knowledge portal PM4Py exercise: Process mining from Jira logs
01	AI Adoption in Organizations	- AI adoption roadmap exercise - Build a procurement checklist for AI vendors
02	Pitfalls & Capstone Project	Group project: Create a PM Playbook that includes: Sample prompts for planning, risk analysis, reporting; An AI-driven risk register; Executive dashboard mockup; Adoption roadmap for their organization

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

Visit koenig-solutions.com

✉ info@koenig-solutions.com