

Day 1 — Foundations & Prompt Engineering

Module 1: 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.
- **Activities:**
 - AI in PM case study review (Agile vs. Waterfall).
 - Group discussion: Where can AI save time in your projects?

Module 2: 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.
- **Activities:**
 - 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.

Module 3: Prompt Engineering Essentials

- **Learning Objectives:**
 - Understand the mechanics of prompting and response tuning.
 - Design prompts for project planning, reporting, and stakeholder communication.
- **Activities:**
 - Iterative prompt-building exercises in ChatGPT / Copilot.
 - Group challenge: Generate a project charter draft in < 3 prompts.

Tools: Microsoft Copilot, Atlassian Intelligence, ChatGPT, Notion AI, Gemini

Day 2 — Planning & Forecasting

Module 1: 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.
- **Activities:**
 - Hands-on with Google Sheets ETS function.
 - AI-assisted backlog estimation exercise.

Module 2: Monte Carlo Risk Simulation

- **Learning Objectives:**
 - Understand Monte Carlo methods for risk modeling.
 - Quantify schedule & cost uncertainties.
 - Build risk-informed executive dashboards.
- **Activities:**
 - Monte Carlo simulation in Python / Excel.
 - Sensitivity analysis of project completion dates.
 - Executive-style report drafting.

Tools: Primavera, Planview, Google Sheets (ETS), Python (Monte Carlo packages)

Day 3 — Execution & Monitoring

Module 1: Workflow Automation

- **Learning Objectives:**
 - Map existing PM workflows into automation flows.
 - Incorporate human approvals and exception handling.
 - Build error-handling and fallback strategies.
- **Activities:**
 - Automation flow design in Zapier / n8n.
 - Build “Auto-task creation” from Slack/Email → Jira.

Module 2: 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.
- **Activities:**
 - Create real-time Grafana dashboard for project KPIs.
 - AI-triggered escalation workflow (ServiceNow / Jira).

Tools: Jira, ServiceNow, Zapier, n8n, Grafana, Power BI

Day 4 — Risk, Decision Support & NLP

Module 1: 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.
- **Activities:**
 - Case study: Updating risk probabilities after project delays.
 - AI-assisted decision memo writing.

Module 2: 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.
- **Activities:**
 - Whisper transcription + LangChain summarization.
 - Build RAG-powered project knowledge portal.
 - PM4Py exercise: Process mining from Jira logs.

Tools: ServiceNow Risk, SAP GRC, Whisper, LangChain, PM4Py

Day 5 — Implementation & Future Trends

Module 1: 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.
- **Activities:**
 - AI adoption roadmap exercise.
 - Build a procurement checklist for AI vendors.

Module 2: Pitfalls & Capstone Project

- **Learning Objectives:**
 - Identify and mitigate key risks (hallucinations, data leakage, model drift).

- Consolidate learning into a structured AI-Enhanced PM Playbook.
- **Activities:**
 - 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.

Tools: Salesforce Einstein, Microsoft Copilot Studio, Hugging Face, GitHub Copilot