



ITCertPath

YOUR CLEAR PATH TO CERTIFICATION

PMP & PROJECT MANAGEMENT LEARNING RESOURCE

Generative AI for Project Managers

Practical AI skills for modern project delivery

25 HOURS

12 MODULES

CAPSTONE

What this resource helps you do

- Use GenAI for project initiation, planning and reporting
- Improve requirements, risks, stakeholder communication and meetings
- Apply responsible AI, governance and security principles
- Build an AI-powered project management workflow

Prepared for ITCertPath learners

Supplementary learning content for PMP and project management development.

PMP and PMI are registered marks of Project Management Institute, Inc.

Generative AI for Project Managers

Practical AI Skills for Modern Project Delivery

Course Duration: 25 Hours

Course Overview

Generative AI is rapidly changing how projects are planned, executed, monitored, and communicated.

This practical 25-hour program is designed specifically for **Project Managers, Program Managers, PMO professionals, Scrum Masters, Delivery Managers, and aspiring AI Project Managers.**

The course focuses on how Project Managers can use Generative AI to improve **productivity, planning, decision-making, communication, risk management, reporting, and project delivery.**

You do **not** need programming, data science, or AI engineering experience to attend this course.

What You Will Learn

By the end of the program, you will be able to:

- Understand AI, Generative AI, LLMs, and AI Agents from a Project Manager's perspective
- Select appropriate AI tools for different project management activities
- Write effective prompts for real-world PM scenarios
- Use GenAI for project initiation and planning
- Generate and improve WBS, requirements, user stories, and acceptance criteria
- Use AI for risk and issue identification
- Improve stakeholder communication and project reporting
- Use AI to prepare for and document meetings
- Analyze project data using AI
- Understand AI automation and AI agents
- Understand the risks, limitations, security, and governance requirements of GenAI
- Understand how managing an AI project differs from managing a traditional IT project
- Build a practical AI-powered Project Management workflow

Course Structure

Module 1 — AI & Generative AI Fundamentals for Project Managers

Duration: 2 Hours

Learn the fundamentals of AI without going deep into technical or programming concepts.

Topics

- What is Artificial Intelligence?
- AI vs Machine Learning vs Generative AI
- Traditional AI vs Generative AI
- What is Generative AI?
- What is an LLM?
- How AI assistants work — simplified
- Tokens and context
- AI hallucinations
- Multimodal AI
- AI Assistants vs AI Agents
- Strengths and limitations of GenAI
- Where GenAI fits into Project Management
- What Project Managers need to know about AI

Outcome

Understand the AI concepts required to confidently work with AI teams, tools, and stakeholders.

Module 2 — Generative AI Tools for Project Managers

Duration: 1.5 Hours

Explore practical AI tools that can support day-to-day project management activities.

Tools Covered

- ChatGPT
- Google Gemini
- Microsoft Copilot
- Claude
- Perplexity
- NotebookLM

Topics

- AI tool landscape
- Choosing the right AI tool
- Comparing AI outputs
- Research vs analysis vs writing
- Working with documents
- AI limitations
- Validating AI-generated information

Practical Exercise

Solve the same Project Management problem using multiple AI tools and compare the results.

Module 3 — Prompt Engineering for Project Managers

Duration: 3 Hours

Learn how to communicate effectively with Generative AI.

Topics

- What makes a good prompt?
- Role prompting
- Providing context
- Defining the task
- Setting constraints
- Defining the desired output
- Zero-shot prompting
- Few-shot prompting
- Structured prompts
- Prompt chaining
- Iterative prompting
- Asking AI to critique and improve its own output
- Prompt validation
- Creating reusable prompt templates

PM Prompt Use Cases

Create prompts for:

- Project Charter
- WBS
- Risk Register
- RAID Log
- Stakeholder Analysis
- Status Reports
- Meeting Minutes
- Escalations
- User Stories
- Requirements
- Executive Summaries
- Project Communications

Practical Exercise

Create a personal library of **10 reusable Project Management prompts**.

Module 4 — AI for Project Initiation & Planning

Duration: 3 Hours

Learn how GenAI can support the early stages of project delivery.

Project Initiation

- Business Case
- Project Charter
- Project Objectives
- Scope
- Assumptions
- Constraints
- Dependencies
- Success Criteria
- Stakeholder Identification

Project Planning

- WBS
- Work Packages
- Activities
- Milestones
- Dependencies
- Initial Estimation
- Resource Requirements
- High-Level Schedule

Practical Exercise

Use GenAI to develop an initial project plan from a project scenario.

Key Principle

AI creates the first draft. The Project Manager validates and owns the final plan.

Module 5 — AI for Requirements & Agile Project Management

Duration: 3 Hours

Learn how AI can improve requirements analysis and Agile delivery.

Requirements Management

- Requirement elicitation
- Requirement analysis

- Requirement clarification
- Functional requirements
- Non-functional requirements
- Requirement ambiguity
- Requirement completeness
- Requirement prioritization
- Requirements improvement

Agile & Scrum

- Epics
- Features
- User Stories
- Acceptance Criteria
- Backlog Refinement
- Sprint Planning
- Sprint Goals
- Retrospectives
- Release Planning

Practical Exercise

Convert a vague business requirement into:

Epic → Feature → User Story → Acceptance Criteria → Test Scenarios

Module 6 — AI for Risk, Issues & Decision Making

Duration: 2.5 Hours

Use GenAI to improve project risk identification, issue analysis, and decision-making.

Risk Management

- Risk identification
- Risk categorization
- Probability and Impact
- Risk scoring
- Risk response
- Mitigation strategies
- Contingency planning
- Emerging risks

Issue Management

Use AI to analyze:

- Root causes

- Business impact
- Technical impact
- Available options
- Recommended actions
- Escalation approach

Decision Making

- Option comparison
 - Pros & Cons
 - Decision matrices
 - What-if analysis
 - Scenario analysis
 - Trade-off analysis
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Module 7 — AI for Communication, Meetings & Reporting

Duration: 2.5 Hours

Learn how AI can significantly reduce the time spent on communication and reporting.

Stakeholder Communication

- Client communication
- Executive updates
- Stakeholder updates
- Escalations
- Difficult conversations
- Status communication
- Tone and audience adaptation

Meeting Management

Before the Meeting

- Agenda
- Objectives
- Questions
- Discussion points

After the Meeting

- Meeting Minutes
- Decisions
- Action Items
- Owners
- Due Dates
- Follow-ups

Project Reporting

Transform project information into:

- Project Status Reports
- Executive Summaries
- Steering Committee Updates
- Key Risks
- Key Decisions
- Action Items

Practical Exercise

Convert a detailed project update into an **executive-level communication**.

Module 8 — AI for Project Data & Tracking

Duration: 2 Hours

Learn how Project Managers can use AI to analyze project data without becoming data scientists.

Topics

- Working with Excel/CSV data
- Project data analysis
- Schedule analysis
- Resource utilization
- Milestone analysis
- Risk analysis
- Trend identification
- Outlier identification
- Executive insights

Example Questions

Use AI to answer:

- Which activities are delayed?
 - Which milestones are at risk?
 - Which resources are overloaded?
 - What are the biggest project risks?
 - What trends are emerging?
 - What should the PM focus on?
 - What should be communicated to leadership?
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Module 9 — AI Automation & AI Agents

Duration: 2 Hours

Understand how Project Managers can move from simply **using AI** to **automating project management activities**.

AI Automation

Understand the basic workflow:

Trigger → AI → Action

Example:

Project Update → AI Analysis → Risk Identification → Notification

Topics

- AI-assisted automation
- Workflow automation
- No-code automation
- AI assistants
- AI agents
- AI Agent vs Chatbot
- AI Agent vs AI Assistant
- Human-in-the-loop
- Agentic Project Management — introduction

Practical Tools

Examples of free/freemium automation platforms may include:

- Make
- Zapier
- Microsoft Power Automate

Module 10 — Responsible AI, Governance & Security

Duration: 1.5 Hours

Learn how to use GenAI responsibly in a corporate environment.

Topics

- AI hallucinations

- Data privacy
- Confidential project information
- Client information
- Intellectual Property
- Copyright
- Bias
- Security risks
- Prompt injection — awareness
- Human oversight
- AI output validation
- Responsible AI

AI Validation Framework

Generate → Verify → Validate → Approve → Use

Key Principle

Never blindly trust AI-generated output.

Module 11 — Managing Generative AI Projects

Duration: 2 Hours

Understand how managing an AI project differs from managing a traditional IT project.

Topics

- What makes AI projects different?
- AI project lifecycle
- Identifying AI use cases
- AI feasibility
- Data readiness
- Proof of Concept
- Prototype
- MVP
- Testing
- Deployment
- Monitoring
- AI project risks

AI Project Team

Understand the roles of:

- Product Manager
- Project Manager
- Data Scientist
- Data Engineer

- ML Engineer
- AI Engineer
- MLOps Engineer
- UX
- Security
- Legal & Compliance

Outcome

Understand enough AI project terminology and lifecycle concepts to effectively manage cross-functional AI teams.

Module 12 — Hands-on Capstone Project

Duration: 2 Hours

Apply the concepts learned throughout the program to a realistic project scenario.

Capstone Challenge

You will be provided with a project scenario and use Generative AI to develop:

1. Project Charter
2. WBS
3. Initial Project Schedule
4. Stakeholder Register
5. Risk Register
6. User Stories
7. Project Status Report
8. Executive Summary
9. AI Governance Checklist

Final Challenge

Demonstrate:

How can Generative AI help a Project Manager save time, improve quality, and make better project decisions?

Recommended Learning Approach

The program follows a **Learn → Demonstrate → Practice → Apply** model.

1. Learn

Understand the concept.

2. Demonstrate

See the concept applied using AI tools.

3. Practice

Perform the activity yourself.

4. Apply

Use the skill on a realistic Project Management scenario.

Tools You May Use During the Training

The training will focus primarily on **free or free-tier AI tools**, so participants can practice outside the classroom.

Core tools include:

- ChatGPT
- Google Gemini
- Claude
- Microsoft Copilot
- Perplexity
- NotebookLM
- Make
- Zapier

Tool availability and free-tier capabilities may change over time.

What This Course Does NOT Cover

This is a **Project Management-focused AI course**, not an AI Engineering course.

The program does not require or focus on:

- Python programming
- Machine Learning algorithms
- Neural network mathematics
- Building LLMs
- Training AI models
- TensorFlow/PyTorch
- Advanced MLOps
- AI model development
- Complex API development

Instead, the focus is on:

Using AI effectively + managing AI projects effectively.

Who Should Attend?

This course is suitable for:

- Project Managers
- Senior Project Managers
- Program Managers
- PMO Professionals
- Delivery Managers
- Scrum Masters
- Product Managers
- Business Analysts
- Technical Project Managers
- IT Managers
- Professionals transitioning into AI Project Management

Prerequisites

No programming or AI engineering experience is required.

Basic understanding of Project Management, Agile, or software delivery concepts is recommended.

Expected Outcome

At the end of the course, participants should be able to confidently answer:

"How can I use Generative AI in my daily work as a Project Manager?"

and

"How do I manage a project that involves Generative AI?"

The ultimate goal is to help Project Managers move from:

Traditional PM

↓

AI-Assisted PM

↓

AI-Powered PM

while maintaining **human judgment, accountability, governance, and control.**

Course Duration

25 Hours

5 Days × 5 Hours

Day	Focus
Day 1	AI Fundamentals, AI Tools & Prompt Engineering
Day 2	AI for Project Initiation, Planning & Requirements
Day 3	AI for Agile, Risk, Issues & Communication
Day 4	AI for Reporting, Data, Automation & AI Agents
Day 5	AI Project Management, Governance & Capstone

Final Takeaway

You don't need to become an AI Engineer.

You need to become a Project Manager who knows how to work with AI.

The future belongs to PMs who can combine project management expertise with AI-powered productivity and decision-making.