

Generative AI for Beginners

Duration: 1 Day

Course Overview

This course introduces participants to Generative AI, its evolution, and its transformative impact on search, creativity, and productivity. Learners will explore prompt engineering fundamentals, multimodal AI (text, image, video), responsible AI practices, and practical demonstrations with tools such as **NotebookLM, Google Gemini, ChatGPT, Claude, and Copilot**.

The program emphasizes **hands-on exercises, case studies, and agent-building** with Zapier and n8n, making AI concepts accessible to all. The course is designed around **Data Analytics, Automation, and Reporting use cases**, helping participants understand how Generative AI can support:

- Automated workflows
 - Data-driven decision-making
 - Report generation and visualization
 - Agent creation and orchestration
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Learning Objectives

By the end of this course, learners will be able to:

- Understand the basics, history, and evolution of Generative AI.
 - Identify popular models (GPT, Gemini, Claude, Copilot, NotebookLM) and how they work.
 - Recognize the ethical implications and societal impact of Generative AI.
 - Compare traditional search engines with reasoning engines in the AI era.
 - Apply prompt engineering techniques (role prompting, step-by-step, context-rich prompts).
 - Generate text, images, and videos using multimodal AI tools.
 - Use NotebookLM, Gemini, ChatGPT, and Copilot for analytics and automation tasks.
 - Create and deploy agents using Zapier and n8n.
 - Discuss responsible AI principles and apply them to real-world automation and analytics scenarios.
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Learning Outcomes

Participants will:

- Confidently describe how Generative AI works and its applications.
 - Construct clear, actionable prompts for diverse tasks.
 - Demonstrate the ability to generate multimodal outputs (text, image, video).
 - Apply responsible AI practices in professional and everyday contexts.
 - Build simple agents for automation workflows.
 - Use NotebookLM, Gemini, ChatGPT, and Copilot effectively for reporting and analytics.
 - Reflect on how Generative AI can enhance workflows in industries such as analytics, education, and marketing.
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Course Modules

Day 1

Module 1: Introduction to Generative AI

- Basics of Generative AI
- History and evolution
- Popular models (GPT, Gemini, Claude)
- How Generative AI works
- Ethical implications and societal impact
- Effective Search and Research Strategies in the AI Era
- Search Engines vs. Reasoning Engines
- Introduction to Retrieval-Augmented Generation (RAG)
- How RAG Enhances AI Responses with External Knowledge
- RAG Use Cases for Reporting, Analytics, and Knowledge Management
- Hands-On Activity:
- Building and Querying a Simple RAG Solution

Duration: 60 minutes

Module 2: Prompt Engineering Fundamentals

- What prompts are and why they matter
- Techniques for effective prompting: role prompting, step-by-step prompting, context-rich prompts
- Draft Framework for Prompting: goal clarity, context enrichment, instruction precision, iteration & refinement
- Compare weak vs. strong prompts
- Hands-On Activity:
- Rewrite vague prompts into powerful ones
- Demonstration and Lab
- Quiz

Duration: 30 minutes

Module 3: Practical Tools – NotebookLM, Gemini, ChatGPT, Copilot

- Introduction to NotebookLM for analytics and reporting
- Using Google Gemini for multimodal generation
- ChatGPT for automation and workflow support
- Copilot for productivity and reporting tasks
- Hands-On Activity:
- Build an AI-Powered Reporting Workflow Using NotebookLM
- Hands-On Activity:
- Use Microsoft Copilot to Summarize and Analyze Business Data
- Quiz

Duration: 60 minutes

Module 4: Multimodal AI: Image & Video Generation

- Introduction to multimodal Generative AI
- How Gemini handles text-to-image and text-to-video
- Use cases: marketing, creativity, analytics, reporting
- Hands-On Activity:
- Generate Analytics and Dashboard Visuals Using Gemini
- Best practices: prompt design for visuals
- Quiz

Duration: 60 minutes

Module 5: Agents & Automation

- What are AI agents?
- Creating agents with Zapier and n8n
- Hands-On Activity:
- Automating Business Processes and Reporting Workflows with AI Agents
- Best practices for agent design

Duration: 60 minutes

Module 6: Introduction to AI Tools – Jan AI & Ollama

- Introduction to Jan AI
- Running local AI models with Jan AI
- Introduction to open-source models and Ollama
- Using command-line and graphical interfaces
- Advantages and Limitations of Local AI Models
- Privacy, Cost, and Offline Usage Considerations
- Hands-On Activity:
- Deploy and Interact with a Local Open-Source Model Using Jan AI and Ollama

Duration: 30 - 45 minutes

Module 7: Introduction to AI Tools - Using Excel and Claude/ChatGPT/Copilot

- Using Claude/ChatGPT and Copilot in Excel for reporting and interactive dashboards
- Generating presentations, documents, and landing pages with Gamma
- Creating professional graphics and marketing assets with Microsoft Designer
- Hands-On Activity:
- Build an AI-Assisted Interactive Sales Dashboard Using Excel and Claude/ChatGPT/Copilot
- Generate a business presentation with Gamma
- Create AI-generated visuals using Microsoft Designer

Duration: 60 minutes

Module 8: Responsible AI

- Principles: fairness, transparency, accountability, privacy, safety
- Real-world risks: bias, misinformation, misuse
- Best practices for end users
- Hands-On Activity:
- Case study discussion with analytics and automation examples (reporting accuracy, compliance, data privacy)

Duration: 30 – 45 minutes

Module 9: Wrap-Up & Reflection

- Q&A
- Key takeaways and reflections on Generative AI in daily workflows