

Exploring Generative AI

An introductory tour of creative applications and responsible use

FA-0612 · 4 hours

Agentic & Generative AI

Explore how generative AI creates text, images and other media, with guided demonstrations and a small project-planning exercise.

Introduction

This four-hour introduction explores generative AI concepts, examples and practical limitations for participants from varied backgrounds. It connects a high-level view of machine learning and generative models with creative and business applications.

Guided demonstrations, discussion and a project-idea exercise help participants assess where these tools might be useful. The course is an orientation, not training to build or deploy advanced models, and generated output must be checked for accuracy, appropriateness and rights.

Learning outcomes

The course teaches participants to:

- Describe generative AI and distinguish content generation from other machine-learning tasks.
- Recognise example model families and applications in text, visual media, music and design.
- Discuss bias, authenticity, inaccurate output, privacy and intellectual-property considerations.
- Explore selected tools through guided demonstrations and evaluate their outputs.
- Outline a small generative AI project idea with a purpose, evaluation criteria and responsible-use boundaries.
- Identify further learning appropriate to their interests and current skills.

Prerequisites

No programming or machine-learning experience is required. Basic computer and web-browser skills are helpful.

Selected hands-on activities depend on tool availability, account access and feature limits; demonstrations can be used where participant access is unavailable. Use only non-confidential sample material.

Training outline

1. Part I — Understanding Generative AI

Introduction to Generative AI

- Defining Generative AI
- Historical Context and Evolution

Key Concepts and Technologies

- High-level machine-learning foundations; no mathematical or programming implementation is required.
- A conceptual introduction to neural networks and deep learning.
- Generative model examples, including GANs and variational autoencoders; relate their purposes to the text and media examples.

Generative AI in Action

- Text-generation examples, including GPT-style language models; outputs may be inaccurate.
- Image and Video Generation
- Music and Art Creation

2. Part II — Applications and Implications

Commercial and Industrial Applications

- Marketing and Advertising
- Product Design and Manufacturing
- Entertainment and Gaming

Creative and Societal Impact

- Digital Art and Music
- Content Creation and Journalism
- Ethical considerations: bias, authenticity, privacy, intellectual property and human review.

Interactive Session: AI-Generated Art and Text

- Guided demonstration with non-confidential sample prompts; compare outputs and discuss their limitations.
- Group Discussion: Potential and Concerns

3. Part III — Planning a Generative AI Project

Getting Started with Generative AI Tools

- Overview of Popular Tools and Platforms
- Basic tool-use workflow: define a task, provide suitable context and review the output.

Outline a Small Generative AI Project

- Ideation and Conceptualization
- Define input data, useful outputs, evaluation checks and human-review responsibilities.

Further Developments and Learning Options

- Discuss selected research directions at an introductory level without presenting speculative capabilities as established facts.
- Explore relevant skills and learning pathways without implying employment or professional qualification outcomes.

4. Part IV — Review and Next Steps

- Course Recap: Key Takeaways
- Q&A Session: Your Thoughts and Questions

Path Forward: Continuing Your Generative AI Journey

- How to select useful official documentation and learning resources.
- Community and Networking Opportunities