



Generative AI for Work and Daily Use

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Module 1: Introduction to Generative AI



Learning Objectives

By the end of this module, learners should be able to:

- Explain what Generative AI is and how it differs from traditional AI.
- Understand how generative models such as GPT and diffusion models work.
- Identify popular Generative AI tools and their use cases.



Explanation

Generative Artificial Intelligence refers to a class of AI systems capable of **creating new content**—such as text, code, music, or images—based on what they have learned from vast datasets.

Traditional AI systems *analyze or classify* data (e.g., detecting spam), while Generative AI *produces* new, original outputs (e.g., writing an email or creating a picture).



How It Works

Most modern Generative AI tools are built using:

- **Transformers:** The architecture behind models like GPT, Claude, Gemini, and Llama.
- **Diffusion Models:** Used in image generation tools like DALL·E, Midjourney, and Stable Diffusion.
- **GANs (Generative Adversarial Networks):** One neural network creates data while another evaluates it.



Real-world Analogy

Think of Generative AI like an *advanced autocomplete system*. When you start typing, it predicts what you might say next—but it can do this for **entire essays, images, code, or even videos**.



Examples

- ChatGPT writing a professional email.
- DALL·E generating a logo for a business idea.
- Copilot suggesting entire blocks of code.



Exercise

1. In your own words, explain the difference between **traditional AI** and **Generative AI**.
2. Research and list 3 Generative AI tools and describe their main purpose.
3. Use ChatGPT to generate a motivational quote and rewrite it in a funny tone.

Quiz

1. What is the main goal of Generative AI? a) Classification b) Prediction c) Creation ☒ d) Optimization
 2. Which of the following models is used for image generation? a) Transformer b) Diffusion ☒ c) RNN d) CNN
 3. True or False: GANs involve two neural networks competing with each other. ☒ True
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Module 2: Everyday Use Cases

Learning Objectives

- Recognize how Generative AI can improve daily productivity.
- Learn to apply AI tools in learning, writing, and communication.
- Explore creative personal applications of AI.

Explanation

Generative AI isn't just for developers—it's for everyone. It can act as your **personal assistant**, **creative partner**, or **learning companion**.

Productivity Examples

- Summarize meeting notes using ChatGPT.
- Draft and polish emails in seconds.
- Plan daily schedules or meal plans.

Learning and Education

- Use AI as a tutor to explain difficult concepts.
- Generate quizzes and flashcards for revision.
- Summarize chapters or articles for faster learning.

Creativity and Entertainment

- Generate art, logos, or character designs.
- Write poems, stories, or lyrics.
- Create social media posts or captions.

Exercise

1. Ask ChatGPT to create a **daily to-do list** for a software developer.
2. Use an image tool like **Canva Magic Studio** or **DALL·E** to design a poster for a personal project.
3. Use AI to summarize an online article of your choice in 3 bullet points.

Quiz

1. Which of the following is **not** a common personal use of Generative AI? a) Summarizing notes b) Automating factory machines ☒ c) Writing social media posts d) Translating text

2. True or False: Generative AI can create personalized workout plans. ☒ True

3. Fill in the blank: AI can be your _____ in learning new subjects. ☒ Tutor

Module 3: Workplace Applications – Content Creation

Learning Objectives

- Explore how AI enhances writing, design, and media production.
- Learn effective prompting for professional content creation.
- Understand how to maintain authenticity when using AI tools.

Explanation

Generative AI can create blogs, reports, visuals, and more—helping professionals save time and boost creativity.

Writing and Communication

- Draft marketing content and press releases.
- Generate SEO-optimized articles or ad copy.
- Edit for grammar, tone, and engagement.

Design and Media

- Generate images for blogs or presentations.
- Use AI video tools (like RunwayML) for quick video edits.
- Produce mockups and visual prototypes.

Best Practices

- Always edit and fact-check AI-generated content.
- Maintain a human voice and ethical transparency.

Exercise

1. Use ChatGPT to generate a 150-word LinkedIn post about “AI in Education.”
2. Create an image that visually represents your post using DALL-E or Canva Magic Studio.
3. Edit the AI’s draft to reflect your personal tone and style.

Quiz

1. Which of the following is a risk of using AI in content creation? a) Increased creativity b) Reduced accuracy ☒ c) Better time management d) Improved visuals
 2. What should you always do after generating content with AI? ☒ Review, edit, and verify the facts.
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Module 4: Workplace Applications – Automation and Analysis

Learning Objectives

- Automate repetitive workflows using AI tools.
- Use AI for data summarization and decision support.
- Identify popular integrations and productivity platforms.

Explanation

Generative AI isn't limited to writing—it can automate processes and analyze data intelligently.

Examples

- Automatically draft meeting summaries.
- Generate reports from Excel data.
- Use AI chatbots for customer support.

Integrations

- **Zapier + OpenAI** for workflow automation.
- **Microsoft Copilot** for AI assistance in Word, Excel, and PowerPoint.
- **Notion AI** for intelligent note management.

Exercise

1. Use ChatGPT to summarize a 2-page report into bullet points.
2. Design a simple automation plan: "When I receive an email about a meeting, automatically create a calendar event."
3. Create a chatbot prompt for responding to a customer query.

Quiz

1. Which tool can automate workflows using AI? ☒ Zapier
2. True or False: Generative AI can extract key points from long documents. ☒ True

Module 5: Hands-On with Visual and Coding Tools

Learning Objectives

- Practice using text-to-image and text-to-code tools.
- Develop small projects combining multiple AI tools.
- Understand how to refine prompts for better results.

Tools Overview

- **ChatGPT / Copilot:** Coding assistance and debugging.
- **DALL-E / Midjourney:** Text-to-image generation.
- **RunwayML / Pika:** Video generation.

Exercises

1. Generate an image of a "Futuristic Classroom" using an image AI.
2. Ask ChatGPT to write a JavaScript function that reverses a string.
3. Use Copilot to optimize the code.

Quiz

1. Which of the following tools can generate code? ☒ GitHub Copilot
 2. True or False: Midjourney is used for coding. ☐ False
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Module 6: Advanced Applications and Workflows

Learning Objectives

- Combine tools to build automated pipelines.
- Learn how to create and integrate custom AI agents.
- Understand the concept of fine-tuning and personalization.

Explanation

Advanced AI workflows connect multiple tools for automation and creativity:

- **Idea → Draft → Visual → Publish**
- **Data → Analyze → Visualize → Summarize**

You can even create personal AI agents that assist with emails, scheduling, or content production.

Exercise

1. Create a workflow that uses ChatGPT for content, Canva for visuals, and Notion for publishing.
2. Plan a custom AI chatbot for a specific role (e.g., a writing coach or study assistant).

Quiz

1. What is "fine-tuning" in AI? ☒ Training a model on specialized data to improve task-specific performance.
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Module 7: Ethics, Limitations, and Best Practices

Learning Objectives

- Understand ethical concerns in AI-generated content.
- Recognize limitations and biases of Generative AI.
- Learn responsible and transparent AI use.

Key Points

- **Transparency:** Always disclose AI involvement.
- **Bias Awareness:** AI reflects the data it was trained on.
- **Privacy:** Avoid sharing personal or confidential information.



Exercise

1. Find an example of biased AI output and discuss how to fix it.
2. Write a short paragraph explaining why ethical AI use matters.



Quiz

1. True or False: AI-generated text can be published without review. ☐ False
 2. What is one ethical principle of AI use? ☒ Transparency
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Module 8: Capstone Project and Course Wrap-Up



Objective

Apply everything you've learned in a practical, creative project.



Project Options

1. **AI-Powered Blog:** Automate article writing and visuals.
2. **Personal Assistant:** Build a daily planner using ChatGPT + Zapier.
3. **AI Story Generator:** Combine ChatGPT + DALL-E to create visual stories.



Submission Requirements

- Describe your goal, tools, and workflow.
- Showcase results (e.g., link, screenshots, or demo).
- Reflect on lessons learned and ethical considerations.