

Google AI Professional Certificate

Key Competencies & Skills Mapping

Grow with **Google**

Build the AI skills employers are looking for

The Google AI Professional Certificate takes you beyond foundational understanding to becoming AI-fluent. Designed by Google experts, this program gets you hands-on experience building the AI skills that employers are looking for.

ABOUT THE GOOGLE AI PROFESSIONAL CERTIFICATE

The certificate curriculum was informed by labor market data. We mapped what AI can do to the most common skills on job descriptions, and validated the list with employers. First, you'll learn the fundamentals of AI, including how to prompt and use AI responsibly. Then, you'll apply AI to the six domains where AI is transforming work, like using AI to help with brainstorming and planning, research, writing and communicating, content creation, data analysis, and coding.

BUILD JOB-READY SOLUTIONS WITH AI

In 20+ hands-on activities, you'll build your portfolio of AI projects you can use at work right away. You'll practice prompting in Gemini with a 3-month no-cost trial of Google AI Pro, but the skills you learn can be applied to any AI tool.

70%

of managers believe having a workforce trained in AI will be critical for their organization's success.¹

91%

of AI-fluent professionals say AI makes them more productive, saving 8 hours per week.²

In under 10 hours, you'll find out what AI can do for you at work:

- ❑ Learn AI skills for any role or industry. No previous experience with AI required.
- ❑ Get practical insights and tips from Google experts who use AI every day.
- ❑ Gain hands-on experience using AI through 20+ activities.
- ❑ Take every course, or select the ones most relevant to your role.

Certificate overview

The **Google AI Professional Certificate** is your path to AI fluency, built by Google experts. Get hands-on practice, and gain the in-demand skills and confidence to apply AI to your job from day one.

The certificate is made up of seven courses:

- **AI Fundamentals.** Learn essential AI concepts and practice prompting effectively.
- **AI for Brainstorming and Planning.** Use AI to brainstorm concepts, build detailed timelines, and organize a clear plan for any goal.
- **AI for Research and Insights.** Use AI as your research partner, leveraging Deep Research and NotebookLM to gain insights, generate summaries, and pressure test ideas for informed decision-making.
- **AI for Writing and Communicating.** Turn rough notes into clear messages, easily adapt them for different stakeholders, practice for presentations by anticipating questions and concerns
- **AI for Content Creation.** Use AI as your creative partner to generate high-quality images, video, and presentations.
- **AI for Data Analysis.** Transform unstructured data into clear insights, and master skills to analyze data, and create compelling visualizations and formulas with Gemini in Google Sheets.
- **AI for App Building.** Master vibe coding and build your own custom app. Tackle the most tedious tasks, all without writing a single line of code.

CONTENT BREAKDOWN



37

Videos where experts at Google will explain key concepts, share guidance and demonstrate how to use AI.



26

Hands on activities that guide you through how to prompt different AI tools to enhance your workplace skills.



53

Readings to deepen understanding and spark ideas about how to use AI at work.



7

Quizzes to measure progress and provide meaningful feedback.

Course 1 — AI Fundamentals

Ready to move beyond the buzz and see real results with AI? This course covers the fundamentals of working with AI, like understanding its strengths and limitations so you can leverage it effectively at work. You'll learn how to give AI clear and specific instructions, called prompts, and how to use AI responsibly by maintaining a "human-in-the-loop" approach.

By the end of this course you'll:

- **Adopt a new way of working with AI**, moving beyond a simple task completer to a professional collaborator.
- **Apply prompting techniques** to brainstorm new ideas and build a library of reusable prompts for daily tasks.
- **Practice prompt chaining** to solve complex, multi-step problems.
- **Generate custom images** by learning how to effectively communicate your creative vision.
- **Use responsible judgement** to apply AI confidently.

CONTENT BREAKDOWN:



8

Videos



4

Hands-on activities



15

Readings



1

Quiz

ESTIMATED TIME TO COMPLETE

2 hours

Course 2 — AI for Brainstorming and Planning

Need to get a new project off the ground? In this course, you'll gain hands-on experience turning abstract ideas into detailed, actionable plans. You'll learn how to brainstorm with speed, evaluate ideas against frameworks, and use Gemini to uncover hidden risks and dependencies. Finally, you'll walk away with the resources and tools you need to move from idea to execution.

By the end of this course, you'll create:

- **A strategic plan to validate your next big idea:** Move from a rough concept to a data-backed market research plan in minutes.
- **An actionable project roadmap:** Instantly transform a simple brief into a detailed workback plan, complete with identified risks.
- **A centralized project hub:** Build a shareable resource in NotebookLM that provides instant answers and keeps your team informed and moving forward.

CONTENT BREAKDOWN:



4

Videos



3

Hands-on activities



3

Readings



1

Quiz

ESTIMATED TIME TO COMPLETE

1 hour





Course 3 — AI for Research and Insights

Need to get up to speed on complex topics, fast? In this course, you'll transform AI into your strategic research partner to accelerate your learning and sharpen your decision-making. You'll start by using Gemini Deep Research to analyze dozens of sources in minutes, moving from raw data to compelling visual reports instantly. Next, you'll learn how to feed NotebookLM diverse sources—like PDFs and videos—to generate instant, actionable summaries. Finally, you'll use meta-prompting techniques to build a custom Gem to simulate an expert persona, allowing you to pressure-test your ideas and gain new perspectives.

By the end of this course, you'll create:

- **A professional research report:** Use Gemini Deep Research to analyze multiple sources and design an infographic to share your findings clearly.
- **The ultimate brief on any topic:** Use NotebookLM to synthesize articles, videos, and transcripts into a single overview so you can get up to speed on any topic, quickly.
- **An expert persona:** Build a custom Gem to simulate stakeholders, such as a skeptical customer or a manager, to test your ideas and uncover new insights.

CONTENT BREAKDOWN:

	4	Videos
	3	Hands-on activities
	3	Readings
	1	Quiz

ESTIMATED TIME TO COMPLETE

1 hour





Course 4 — AI for Writing and Communicating

Spending too much time writing, editing and refining your communications? In this course, you'll learn how to use AI as your writing partner to turn rough notes into polished messages that achieve greater clarity and influence at work. You'll start by using Gemini in Google Meet to transform raw transcripts into organized reports. Next, you'll enhance your work by prompting Gemini to provide feedback from different perspectives. Finally, save time by using Gemini Canvas to adapt your writing for various groups and Gemini Live to practice your talking points.

By the end of this course, you'll create:

- **An action plan:** Use Gemini in Meet to capture meeting notes and key decisions, then transform them into a shareable report with clear next steps.
- **A stakeholder cheat sheet:** Prompt Gemini to simulate a stakeholder's perspective to help you identify gaps in your work and prepare for high-stakes reviews.
- **Tailored communications:** Use Gemini Canvas to quickly transform one document into multiple formats, such as a formal memo for leadership and a brief update for your team.
- **A polished pitch:** Practice your talking points with Gemini Live to get instant feedback and improve your delivery for important conversations, like a sales pitch or formal feedback.

CONTENT BREAKDOWN:

	5	Videos
	4	Hands-on activities
	4	Readings
	1	Quiz

ESTIMATED TIME TO COMPLETE

1 hour





Course 5 — AI for Content Creation

Ready to bring your creative ideas to life? In this course, you'll learn to use AI as your creative partner to generate, refine, and critique assets, helping you move from a rough concept to a polished deliverable in minutes. You'll learn to generate high-quality images and videos directly in Gemini, then use Gemini in Google Slides to turn basic decks into professional presentations. Beyond that, you'll learn to use AI as a "creative director" to establish design guidelines and ensure your work is both consistent and impactful.

By the end of this course, you'll create:

- **Custom marketing assets:** Move from promotional concept to reality by using image and video generation models.
- **A slide deck from any document:** Use Gemini Canvas to instantly turn dense reports or notes into a structured presentation outline, tailored for any audience.
- **An engaging presentation:** Use Gemini, Canvas, and Google Slides to translate your vision into professional designs and formatting, creating a polished deck in minutes.
- **A creative review:** Act as the lead designer by using AI to establish brand guidelines and generate actionable feedback to refine your work.

CONTENT BREAKDOWN:

	5	Videos
	4	Hands-on activities
	4	Readings
	1	Quiz

ESTIMATED TIME TO COMPLETE

1 hour





Course 6 — AI for Data Analysis

Are the answers you need buried in a dataset you can't decipher? In this course, you'll learn to use AI as your analytical partner to transform unstructured data into clear, actionable insights. You'll use Gemini to identify the right success metrics for any project and practice converting messy, raw data into structured tables. You'll use everyday language to generate powerful spreadsheet formulas and create compelling charts in Google Sheets—empowering you to make smarter, data-driven decisions.

By the end of this course, you'll create:

- **Success metrics you can stand by:** Use Gemini to define exactly what to measure for your project so you can present your results with confidence.
- **A structured dataset:** Clean and organize messy information into a structured Google Sheets table that is ready for immediate analysis.
- **Data visualizations and formulas:** Use natural language to generate spreadsheet functions and create charts that visualize your findings to drive evidence-based decisions.
- **Interactive business simulators:** Use Gemini Canvas to build visual tools with adjustable sliders that let you test "what-if" scenarios and instantly see their impact to make faster, data-driven decisions.

CONTENT BREAKDOWN:

	5	Videos
	4	Hands-on activities
	4	Readings
	1	Quiz

ESTIMATED TIME TO COMPLETE

1 hour





Course 7 — AI for App Building

Wish you could build a tool to make your workday a little easier, but don't know where to start? This course teaches you how to build with AI by vibe coding, the process of developing code using natural language. You'll start by analyzing your professional workflow to identify an opportunity where an app can have the biggest impact. Then, you'll build it to solve that exact challenge. You'll also learn the common pitfalls of vibe coding to ensure you are developing responsibly. Show off your advanced AI skills by sharing your app and testing it at work.

By the end of this course, you'll:

- **Master how to communicate with AI** using everyday language to generate, test, and refine functional code.
- **Audit your professional workflow** and pinpoint the highest-value opportunities to use AI in your work.
- **Build a functional, shareable app** tailored to your specific workplace needs, helping you solve your most complex workflow challenges.
- **Gain hands-on experience using Google AI Studio** to explore, test, and build with our most capable models.

CONTENT BREAKDOWN:

	6	Videos
	4	Hands-on activities
	3	Readings
	1	Quiz

ESTIMATED TIME TO COMPLETE

1 hour