Free Training Materials for 35 Artificial Intelligence Courses from edX.org



edX has free **artificial intelligence (AI) courses**, including fundamentals, penetration testing, digital forensics, incident response, and governance.

edX's **free audit** track provides temporary access to videos, readings, and any available ungraded practice, and not graded assessments or a verified certificate. Look for "Audit course" under "Ways to take this course."

Below are linked course titles and descriptions, with audit available.

AI basics and getting started

Course and link	Description
AI for Everyone: Master the Basics	Learn what AI is, where people use it, and how machine learning and neural networks fit in. Also explores bias, ethics, jobs, and a small practical project. No programming background is required.
AI Fundamentals: Core Concepts and Principles	Learn what AI truly is, with no nonsense, doubt, or pressures. This course covers AI origins, data principles, algorithmic learning domains, and explainability. Intended for people at every level.
AI Literacy 101	Develop core generative AI abilities for professional communication. Understand how to compose effective prompts, create and modify graphics, and assess AI-generated results.
Introduction to Generative AI	Understand AI that creates text, images, and code. Practice giving it useful instructions, improving its answers, and recognizing its limitations. Some programming experience helps but is not required.
Learning How to Learn: Unlocking a Growth Mindset with AI	Explore the relationship between AI tools, learning, and developing a growth mindset.

ChatGPT, prompting, and practical applications

Course and link	Description
AI for Learning on the Job	Use AI as a customized learning coach for ongoing professional growth and rapid expertise development. Use AI as a "second brain" to go from worker to tactical controller.
AI at Work: Tools, Workflows & Real-World Application	Turn AI awareness into action: master tools, procedures, and applied rapid engineering in actual professional scenarios in one self-paced course for all levels.

Course and link	Description
Applied Local Large Language Models	Enable large language models on your system. Use straightforward online interfaces and APIs to build and use the latest LLMs. Explore Hugging Face, Mozilla, and other tools, programming languages, and platforms for LLM deployment.
Building AI Agents for Beginners	Learn how to use the technologies that are altering the way work is done. Learn how to create, implement, and run automated AI agents that do sophisticated, multiple-stage processes. No coding is necessary.
AI Agents for Everyone	Discover how AI agents function and use them to automate manual activities and boost output. This course investigates the agent approach in AI, demonstrating how self-directed systems operate for you throughout Microsoft's environment.
Advanced RAG	Learn advanced RAG practices to improve LLM applications. Understand embedding methodologies, document processing, and sophisticated retrieval techniques for developing high-performance AI applications in professional environments. 10 immersive labs and workouts that you discover by doing.

Programming and building AI systems

Course and link	Description
CS50's Introduction to Artificial Intelligence with Python	Use Python projects to learn how AI searches for solutions, reasons about information, makes predictions, and learns from data. This is a programming-oriented course, not simply an introduction to using chatbots.
Machine Learning and AI with Python	Understand how to apply decision trees, which are the core technique for gaining insight into machine learning and AI.
Generative AI and LLMs on AWS	Study generative AI and large language models in the context of Amazon Web Services. This link goes to the provider's free-audit course directory; the detailed syllabus was not available in the retrieved material.
Azure AI Fundamentals: Build & Deploy AI	In this course, professionals in technology are introduced to artificial intelligence learning principles, basic AI concepts, and how to use Azure AI services to create intelligent applications.
End to End LLM with Azure	Learn how to use Azure services to create and implement reliable Large Language Model applications. Learn about integrated solutions, automation, and architectural models to use LLMs in your work.
Agile with AI	Explore AI in the context of Agile work methods. This link goes to the provider directory; the retrieved listing did not include enough detail for a fuller syllabus summary.
Vibe Coding: Rapid	Explore using AI-assisted coding to create early versions of software

Course and link	Description
Prototyping with AI	ideas.
Implementing AI Algorithms from Scratch	Create basic machine-learning and AI algorithms from the ground up to discover how they function underneath specialized libraries. This more sophisticated approach includes neural networks, clustering, ensembles, optimization, classification, and regression.
LLM Server	This course will teach you how to access open-source models, configure a GPU server on your own platform, and create programmed and agent-based apps using those models.

Generative AI and prompt engineering

Course and link	Description
Introduction to Generative AI	Learn how generative AI creates text, images, audio, video, and code. Explore common tools and models through examples and hands-on labs.
Introduction to Prompt Engineering	Practice writing questions and instructions that help tools such as ChatGPT produce more relevant results. Designed for a broad audience, including students and professionals.
Models and Platforms for Generative AI	Understand the main model types behind generative AI and the platforms developers use to build AI-powered applications.
Foundations of Generative AI	Build an understanding of how generative AI developed, how it works, and how to move from basic use toward practical integration.
Generative AI for Everyone	Explore everyday uses of AI for writing, images, voice, video, communication, and workplace productivity, with attention to its limitations.

Workplace, education, and public affairs

Course and link	Description
AI for Workplace Productivity	Learn how AI tools can reduce repetitive work, support decisions, and improve everyday business workflows. It focuses on practical use rather than technical development.
Artificial Intelligence in National Security	Learn how AI affects defense, surveillance, warfare, and government strategy. The course is designed to take about five hours.
ChatGPT — Usos y Estrategias	A Spanish-language introduction to using ChatGPT responsibly in education and work, including privacy, reliability, and plagiarism concerns.

Technical AI, coding, and computer vision

Course and link	Description
Generative AI Application Development Fundamentals	Learn the building blocks of AI applications, including prompting, LangChain workflows, and techniques for improving reliability.
Mastering Generative AI: Agents with RAG and LangChain	Learn to build AI applications that retrieve outside information before answering, and use LangChain to organize more complex AI workflows.
AI Orchestration	Implementing a model is simple, the goal is to choose where it runs. This course develops a Rust prompt engineering pyramid, analyzes Ollama, llamafile, and Candle on your GPU, and compares local inference to AWS Spot and hosted endpoints on speed, expense, and anonymity.
Computer Vision Fundamentals with Google Cloud	Learn how to solve image-recognition problems using ready-made Google Cloud tools and custom image classifiers.
Mastering Advanced AI Tooling in Codex	Configure an AI coding agent to plan changes, edit code, run tests, and continue work across sessions. Intended for developers already comfortable with repositories and command-line tools.
Explicit by Design: Zig for Rust Developers	If you're looking at memory, lifetimes, and zero-cost abstractions in Rust, Zig's explicit allocators, comptime, and a small-kilobyte build are an alternative approach. You will contrast the two languages, develop a command-line utility and HTTP server in Zig, and deploy the server in a Docker image under 20 KB.

How to enroll without paying

1. Open the individual course page rather than a certificate-program checkout.
2. Find “Ways to take this course.”
3. Select **Audit course** and continue with the audit option rather than “Earn Certificate.”
4. Check the access-expiration date and what the audit track includes. Free audit access is time-limited, and graded assignments and certificates are generally excluded.

Where to begin

For a nontechnical introduction, Google’s *AI for Anyone* and IBM’s *AI for Everyone* explicitly require no programming background. For learning to use a chatbot, edX’s *Introduction to ChatGPT* is the more directly practical starting point. For building AI in code, Harvard’s CS50 AI course takes a project-based Python approach.