

Building with LLMs Short Course

40 · R19,995

Clients and employers want AI inside their products — not just in their developers' editors.

This hands-on course teaches Python developers to build reliable AI features with th...

40

Hours of Training

R19,995

Course Fee

5 Days

Full-Time Option

JHB · Online

Nationwide

COURSE CURRICULUM

What You'll Learn

How LLMs Work for Developers

Tokens, context windows, temperature and reasoning models — what actually drives quality, speed a...

OpenAI & Claude APIs Side by Side

Messages, multi-turn conversations, streaming, error handling, retries, rate limits and cost trac...

Prompting for Applications

System prompts, few-shot examples, prompt templates and prompt caching — and how to test prompts ...

Structured Output

Getting dependable JSON with schemas and Pydantic, extracting data from documents and emails, and...

Tool Calling

Letting the model call your own functions and APIs, chaining multiple tool calls, and handling er...

Embeddings & Retrieval-Augmented Generation

Embeddings, chunking, vector stores, re-ranking and measuring retrieval quality — build a "...

AI Agents

When an agent beats a simple workflow, building agents with the OpenAI Agents SDK and Claude Agen...

Model Context Protocol (MCP)

Build your own MCP server to expose your company's data and APIs to Claude and other AI tools — w...

Local & Open Models

Running open-weight models with Ollama, keeping sensitive data on your own infrastructure for POP...

Evals, Safety & Capstone

Automated evals, LLM-as-judge, prompt injection, guardrails and monitoring cost in production. Ca...

IS THIS FOR ME?

Who Is This Course For?



Python Developers Adding AI Features

You build software in Python and want to add chat, search, data extraction and automation powered by LLMs.



Full-Stack Developers & Bootcamp Graduates

Take the AI module from the Web Developer Bootcamp much further — RAG, agents, MCP and evals.



Teams Building Internal AI Tools

Build assistants over your company's documents and systems — with control over cost, privacy and quality.



Tech Leads Evaluating AI

Understand what LLMs can and can't do reliably, what they cost, and when to build versus buy.

COURSE OUTCOMES

What You'll Be Able to Do

- 13 Choose the right model for a task based on quality, speed and cost
- 13 Get reliable structured output with schemas and Pydantic
- 13 Build a RAG assistant that answers questions from your own documents
- 13 Build your own MCP server and run models locally with Ollama
- 13 Call the OpenAI and Claude APIs with streaming, retries and cost tracking
- 13 Let models call your own functions and APIs with tool calling
- 13 Build AI agents with the OpenAI and Claude agent SDKs
- 13 Test AI features with evals and protect them against prompt injection

Prerequisites: Comfortable Python (functions, classes, packages and virtual environments), REST APIs and Git. Code College Web Developer Bootcamp graduates already meet this.

WHAT TO EXPECT

Your Learning Experience



Expert-Led Training

Taught by experienced bootcamp instructors with 30+ years of combined industry experience.



Hands-On Projects

You write code from day one. Every concept is reinforced with real exercises and a practical project you keep.



Johannesburg & Online

Hybrid: one or two days a week at our Midrand campus (Vorna Valley), or 100% live online from anywhere in South Africa.



Certificate of Completion

Receive a Code College certificate on completion — recognised by employers across South Africa.

2026 PRICING

Investment

PRE-PAID — BEST VALUE

R19,995

One flat price — no hidden fees

FULL PRICE

R19,995

Flexible payment options available

Get in Touch

 info@codecollege.co.za +27 (0)10 970 7777 WhatsApp: +27 83 600 2765 codecollege.co.za/programming-courses/building-with-llms/

Student loans & payment plans available · Group rates on request · EFT & card accepted