

The background is a detailed illustration of a futuristic AI academy. It features a multi-level building with large glass windows and doors. Inside, students are seen working at computers and interacting with large digital displays. The displays show various AI-related concepts, including neural networks, data visualizations, and a large, glowing AI head. The overall color palette is dominated by light blues, purples, and greys, giving it a high-tech, digital feel.

DUTYTAP AI Career Academy

AI Software Engineer Flagship Program

Duration: 7 Months — A structured, job-focused journey designed to take you from zero to a production-ready AI engineer.

FROM SCRATCH → AI ENGINEER → JOB READY → INTERNSHIP → PLACEMENT

Your Weekly Schedule

DutyTap's weekly rhythm is designed to build consistent habits, maximize retention, and simulate real engineering work schedules. Every hour is intentional.

Monday – Friday

- 2 hours live class daily
- 2 hours mandatory coding practice
- 1–2 hours self-study

Saturday

- 3–4 hours live project building
- Weekly hackathon
- Test + evaluation

Sunday

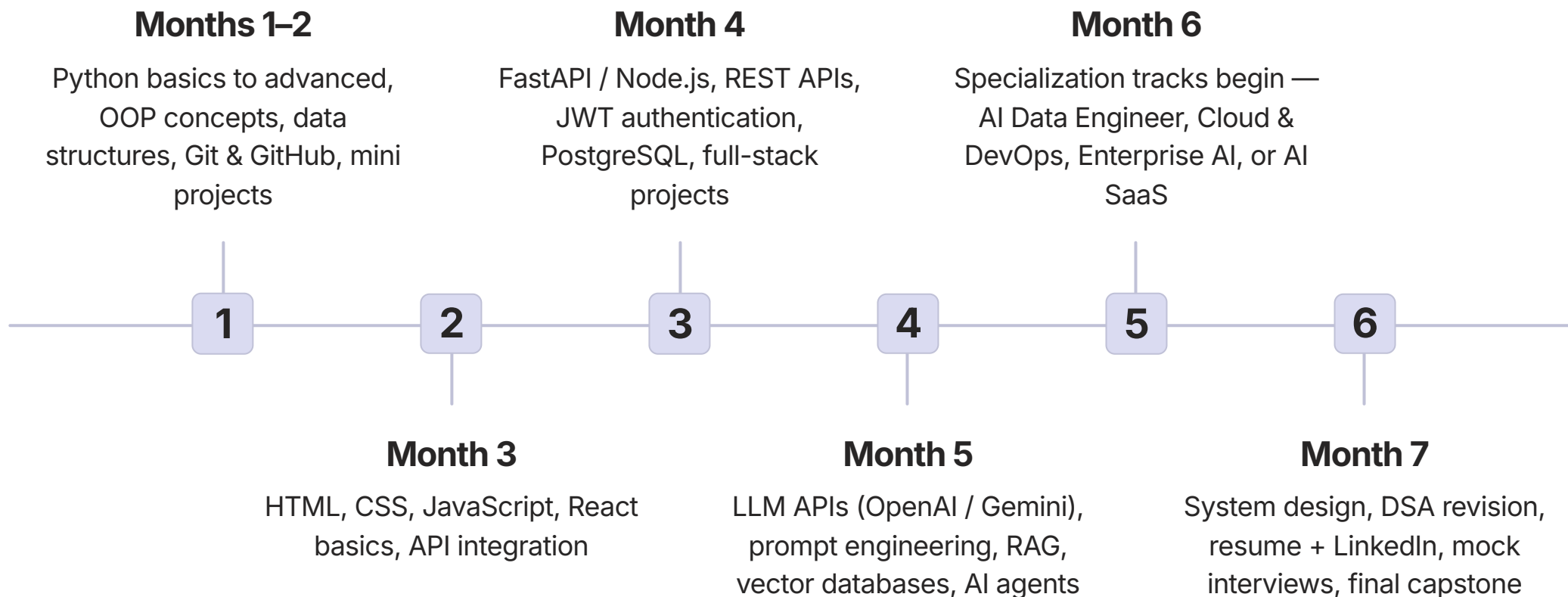
- Holiday — no mandatory classes
- Optional: recorded videos
- Revision + career guidance



Consistency is the foundation of mastery. This schedule mirrors the pace of top tech bootcamps worldwide.

Full 7-Month Syllabus

A progressive curriculum that builds from Python fundamentals to advanced AI systems, with each phase unlocking new capabilities and real-world project opportunities.



Months 1–2: Python Foundation

What You'll Master

The first two months lay the groundwork for everything that follows. You'll go from writing your first Python script to building structured applications using object-oriented design patterns.

Python Basics → Advanced

Variables, loops, functions, error handling, file I/O, and advanced Pythonic patterns

OOP Concepts

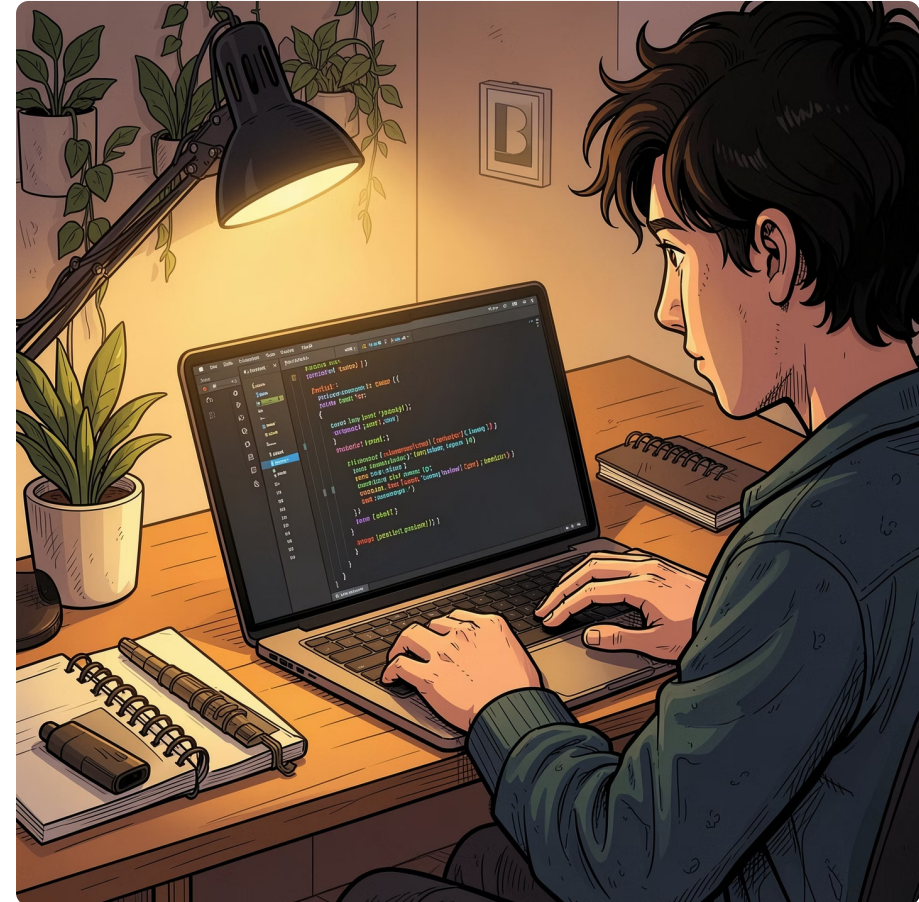
Classes, inheritance, polymorphism, encapsulation, and design patterns

Data Structures

Lists, dictionaries, sets, stacks, queues, trees, and algorithmic thinking

Git & GitHub

Version control, branching, pull requests, and collaborative workflows



Output: 5 mini projects by end of Month 2 — your first portfolio pieces.

Months 3–4: Full-Stack Development

Transition from backend Python to full-stack engineering. You'll build interactive frontends, connect them to APIs, and deploy real applications with databases.



Frontend (Month 3)

HTML5, CSS3, modern JavaScript (ES6+), and React fundamentals. Build responsive UIs and consume REST APIs from the frontend.



Backend (Month 4)

FastAPI or Node.js for building RESTful APIs. Implement JWT authentication, connect PostgreSQL databases, and structure production-grade backends.



Full-Stack Projects

3 complete full-stack applications built end-to-end. These become core portfolio pieces demonstrating your ability to ship real software.

Month 5: AI & LLM Engineering

Enter the AI Era

Month 5 is where the program differentiates itself. You'll work directly with cutting-edge large language models and build intelligent systems that understand, reason, and respond.

1 LLM APIs

Hands-on integration with OpenAI GPT-4 and Google Gemini — building real AI-powered features

2 Prompt Engineering

System prompts, chain-of-thought, few-shot learning, and prompt optimization strategies

3 RAG & Vector Databases

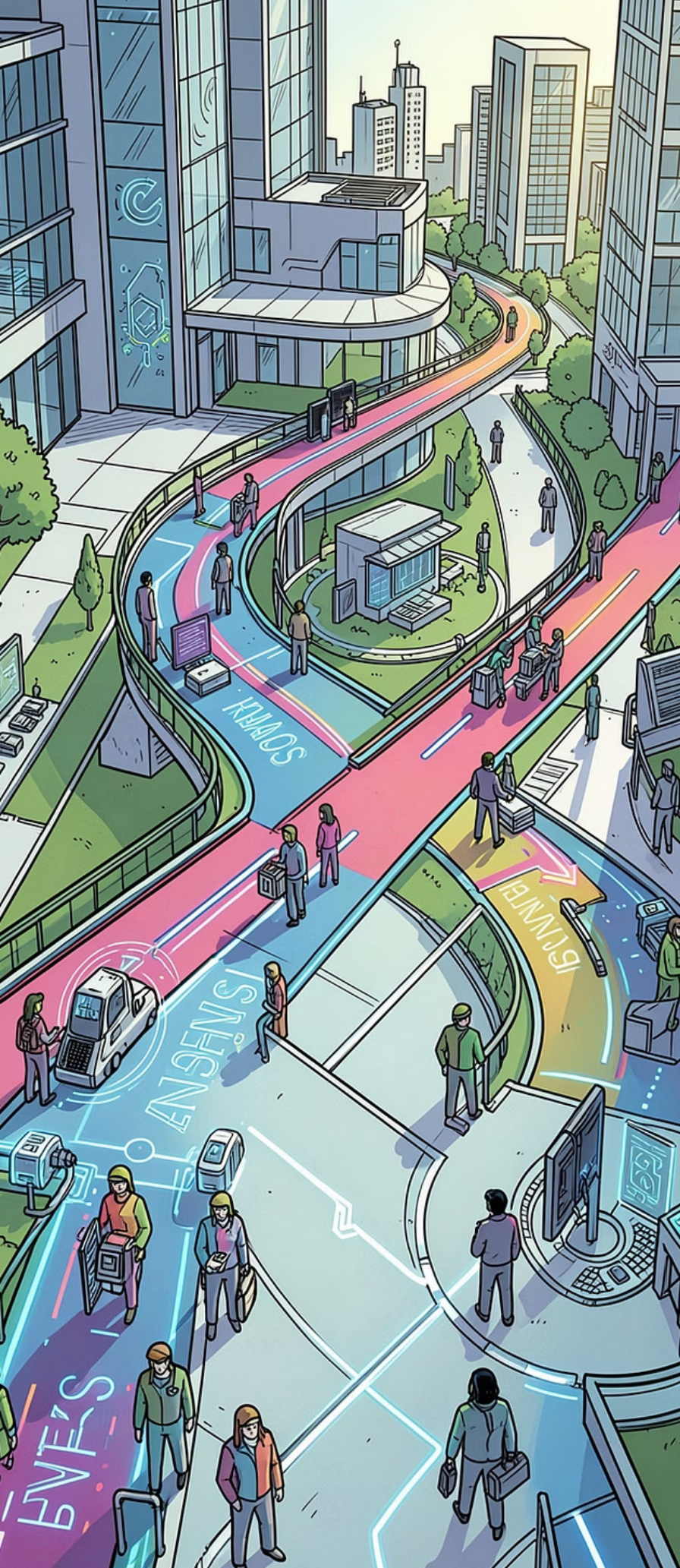
Retrieval-Augmented Generation using Pinecone, Chroma, or pgvector for knowledge-aware AI

4 AI Agents

Autonomous agents using LangChain and AutoGPT patterns for multi-step task execution



Output: 4 AI projects — including a RAG-powered chatbot and an autonomous AI agent.



Month 6: Choose Your Specialization

In Month 6, you select a track aligned with your career goals. Each specialization delivers deep, job-ready skills in a high-demand domain.



AI Data Engineer

Advanced SQL, ETL pipelines, data warehousing, and big data tooling for AI-ready data infrastructure



AI Cloud & DevOps

Docker, AWS services, CI/CD pipelines, and cloud deployment strategies for scalable AI systems



Enterprise AI Engineer

CRM integration, enterprise API systems, and client-facing AI solutions for forward-deployed roles



AI Software Engineer

Advanced AI SaaS architecture, multi-tenant systems, and production-grade AI application development

Project Structure: Build as You Learn

DutyTap's project-first philosophy ensures you graduate with a portfolio of real, working applications — not just certificates. Every month, you ship something tangible.

5

Mini Projects

Months 1–2: Python fundamentals applied to real problems

3

Full-Stack Apps

Months 3–4: Complete applications with frontend, backend, and database

4

AI Projects

Month 5: LLM-powered apps including RAG systems and AI agents

2–3

Specialization Projects

Month 6: Deep-dive projects in your chosen career track

1

Capstone SaaS

Month 7: One production-ready AI SaaS application — your flagship portfolio piece



Every project is reviewed by mentors, stored on GitHub, and can be presented directly in job interviews.

Final Capstone: Your AI SaaS Application

What You'll Build

Your capstone is a fully production-ready AI SaaS application — the kind of project that gets you hired. It combines everything you've learned across all 7 months into one deployable, portfolio-worthy product.

→ Frontend

React with modern UI/UX patterns

→ Backend

FastAPI or Node.js with REST architecture

→ Database

PostgreSQL with optimized queries

→ AI Integration

LLMs, RAG pipelines, and autonomous agents

→ Deployment

AWS or Vercel — live and accessible

Example Capstone Projects

AI CRM System

Intelligent customer relationship management with AI insights

AI Hiring Platform

Automated resume screening and candidate scoring

AI Customer Support SaaS

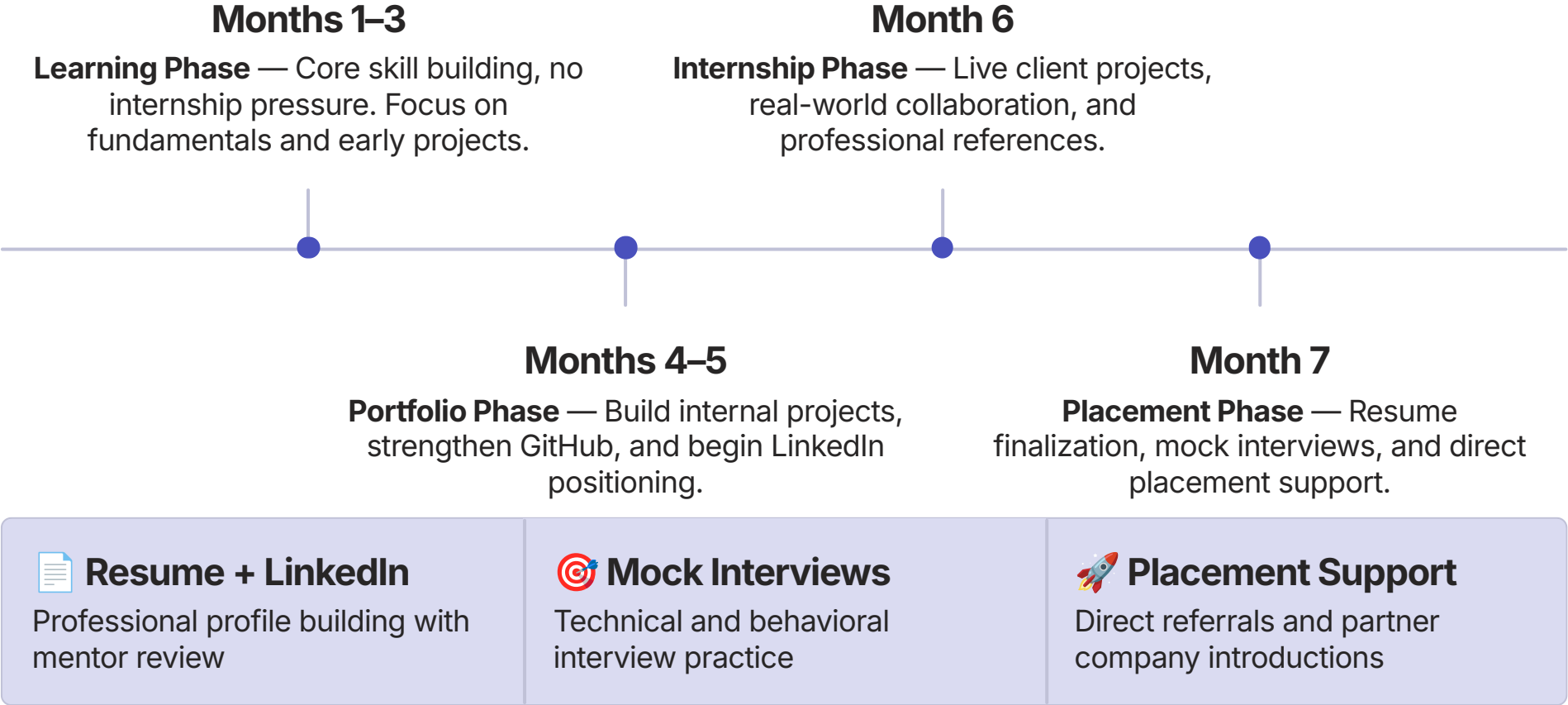
RAG-powered support bot with ticket management

AI Content Generator

Multi-format content creation platform for businesses

Internship + Placement Timeline

DutyTap's placement pipeline is built into the program structure. You won't scramble for opportunities at the end — you'll be prepared, connected, and interview-ready from Day 1.



From Scratch → AI Engineer → Job Ready → Internship → Placement. That is the DutyTap promise — and the program is built to deliver it.