



In partnership with



BACK-END WEB DEVELOPMENT

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Professional Foundations Programme

(your first 3 months)

What is Professional Foundations?

Professional Foundations is a foundational programme that helps young professionals develop the essential skills needed to excel in their careers.

Over 3 months, learners engage in a programme designed around practical skills and knowledge, specifically tailored to the modern tech workplace. Through a mix of individual projects, team-based challenges, and real-world applications, this programme builds a solid foundation for professional success.

Why is this Programme Important?

In today's job market, technical skills alone are not enough for a successful career. Employers seek well-rounded professionals who possess both technical know-how and soft skills—like communication, problem-solving, and leadership.

The Professional Foundations programme bridges this gap, empowering learners to navigate complex work environments with competence and confidence. This programme provides a complete toolkit for building the vital skills professionals need to succeed in a career in any industry.

Career Readiness

Learners gain critical professional skills that help them stand out in the workforce and succeed in tech-focused roles.

Collaborative Learning

Learners work in squads, encouraging peer-to-peer learning, teamwork, conflict resolution, and a culture of continuous growth. This experience also helps build a professional network, and networking skills, that will help learners grow their future careers.

Practical Application

The programme features hands-on exercises and deliverables that allow learners to immediately apply their newly acquired skills, making learning both engaging and relevant to the real world.

Key Components of the Programme

Professional Foundations emphasises 8 key Meta-Skills across Leadership, Analysis, and Execution—essential skill sets for thriving in today's workplace.

Tech Skills

Leading Self

Leading Others

**Communicating
for Impact**

Critical Thinking

**Quantitative
Reasoning**

**Managing
Complex Tasks**

**Entrepreneurial
Thinking**

7 Months (20 hrs per week)

What is Back-End Web Development?

The programme aims to equip learners with the skills needed to construct robust server-side solutions through practical exposure to server, database, and application logic for the development of dynamic web applications.

Why Back-End Web Development?

In response to the industry's growing need for adept back-end developers, this programme presents a flexible learning pathway for individuals eager to explore server-side programming and database management.

Programme Objectives

- Gaining proficiency in backend languages, frameworks, and databases.
- Mastering RESTful API design, authentication, and server deployment.
- Building and deploying a fully functional web application.

Technologies and Concepts Covered

- Backend language (Python)
- Web Framework (Django)
- Database management with SQL (e.g., MySQL) and NoSQL (e.g., MongoDB) databases.
- REST API, Authentication, and other backend concepts.

Why Choose Us?

ALX Foundations

Before starting the Back-End Web Development programme, learners complete our 3-month foundational training, where they acquire vital skills such as self-awareness, teamwork, communication, and critical thinking—essential for success in tech

Hands-On Learning

Focused on practical application through project-based learning, facilitating the direct application of theoretical knowledge to real-world scenarios for a comprehensive understanding of concepts.

Mentor Support

Receive guided learning from experienced mentors to navigate through backend challenges, gaining valuable insights and support linked directly to real-world experiences and industry best practices.

Tools Learners Get to Use



VS Code



Git



GitHub



Bash Shell (WSL2, Ubuntu)

7-Month

Programme

100%

Digital (Online)
Learning
programme

20 hrs

Per Week

Specialisation

- **Project releases:** Projects are released on Mondays and ends by end of Sundays
- **Live learning sessions:** Twice weekly live learning sessions. Learners will be introduced to the projects for the coming week during the first session and then there will be a deep dive into the concepts during the second session.
- **Peer learning days:** There is a dedicated day for learners to connect with one another and study together.

Content Breakdown

Part 01: Onboarding and introduction to web	Part 10: Introduction to Django
Part 02: Version control	Part 11: Deep Dive into Django Models and Views
Part 03: Command Line Basics	Part 12: Advanced Features and Security
Part 04: Introduction to Python	Part 13: Introduction to Building APIs with Django REST Framework
Part 05: Introducing Logic into programming (Control flow and loops)	Part 14: Advanced API Development with Django REST Framework
Part 06: Functions, Data Structures & Modules	Part 15: Building a Complete Django Application
Part 07: Programming Paradigms & Exception handling	Part 16: Building and deploying a Django API
Part 08: More about OOP	Part 17: Capstone Project
Part 09: Introduction to Databases	