



# Back-End Web Development Overview

6 months (20 hrs / week)

## What is Back-End Web Development?

The programme is a comprehensive 18-week part-time venture, aiming 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 backend 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 8-week foundational training, acquiring vital skills like 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.

# Weekly Foundations Schedule

08 Weeks (20–30hrs / week)

## What is ALX Foundations?

- A career-readiness training module to kick-start your ALX learning journey before moving on to your chosen specialisation.
- Learn exceptional communication, teamwork, and leadership skills that make ALX graduates top picks in the job market.
- Be ready for a real-world career with soft skills that keep you ahead in the rapidly changing tech industry.

## 8 Key Meta Skills

1. **Leading Self**
2. **Leading Others**
3. **Communicating for Impact**
4. **Quantitative Reasoning**
5. **Entrepreneurial Thinking**
6. **Critical Thinking**
7. **Managing Complex Tasks**
8. **Tech Skills**

## Weekly Content

### Week 01

- Getting Started
- Daily 3
- Onboarding & Programme Overview
- The ROOM Fellowship
- Values & Community
- GCGOs for Africa

### Week 02

- Daily 3
- Karibu Lessons
- Values & Empathy
- Exploring African GCGOs
- Self Awareness & Emotional Intelligence
- Growth Mindset & Grit
- Self Regulation & Improvement
- Time Management

### Week 03

- Daily 3
- Habit Formation
- Goal Setting
- Defining Problems & User Stories
- Problem Solving
- Asking the Right Questions
- Research Methodology & Ethics

### Week 04

- Daily 3
- Goal Setting
- Communication for Impact
- Creating Presentations & Technical Writing
- Communication in Tech Teams
- Design Thinking
- Work Planning

### Week 05

- Daily 3
- Problem Definition
- Teamwork Best Practices
- Agile Technology Teams: Roles & Processes
- Research & Data Gathering
- Data Cleaning & Preparation
- Data Visualization
- Identifying Opportunities
- Generating Solutions
- Understanding the Market

### Week 06

- Daily 3
- Understanding the User
- User Interviews
- Wireframes & Prototype
- Human Centered Design

### Week 06 (Cont)

- Teamwork & Team Communication
- Conflict Management & Negotiation

### Week 07

- Daily 3
- Improving on Your Solution
- Product Requirements
- Design Handover Process
- Pitch Preparation
- Powerful Presentations
- Identifying Opportunities
- Personal Brand & Bio
- Career Skills

### Week 08

- Daily 3 Reflection & Commitment
- Elevator Pitch
- Exploring Tech Tracks
- Resume Writing
- LinkedIn Profiles
- Cover Letters
- Interview Skills

# Weekly Specialisation Schedule

- **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.

## Weekly Content

**Week 00:** Onboarding and introduction to web

**Week 01:** Version control

**Week 02:** Command Line Basics

**Week 03:** Introduction to Python

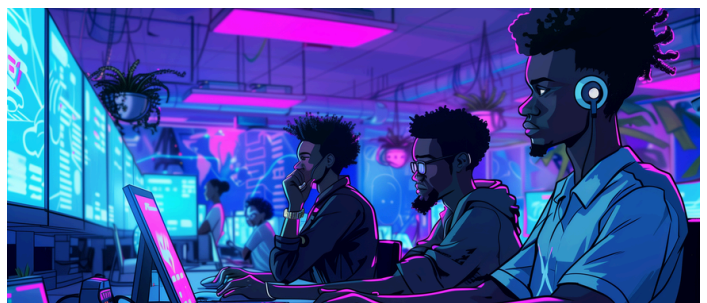
**Week 04:** Introducing Logic into programming (Control flow and loops)

**Week 05:** Functions, Data Structures & Modules

**Week 06:** Programming Paradigms & Exception handling

**Week 07:** More about OOP

**Week 08:** Introduction to Databases



**Week 09:** Introduction to Django

**Week 10:** Deep Dive into Django Models and Views

**Week 11:** Advanced Features and Security

**Week 12:** Introduction to Building APIs with Django REST Framework

**Week 13:** Advanced API Development with Django REST Framework

**Week 14:** Building a Complete Django Application

**Week 15:** Building and deploying a Django API

**Week 16 & 17:** Capstone Project



# YOUR LEARNING JOURNEY



## Kickstart your career in Tech

85% of learners find a job after 6 months with a certificate of completion.

**LAUNCH**



## By learning from industry experts

Our instructors are fully-vetted with industry experience.

**1**

## And developing your professional foundations

Get a professional portfolio and skills for better employability.

**3**

**2**

## Gaining work ready skills

Learn up-to-date tech innovations with real-world projects.

**4**

## In a state-of-the-art learning environment

Network, collaborate and co-work with peers online or offline.



**5**

## With support from your peers.

Our alumni get access to our Fellowship community and events.



# GET STARTED

**apply now**

**6**



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# 2024 Calendar

Programme - Cohort #	Application Deadline	Onboarding Starts	Programme Starts
Data Analytics - C3	27 Feb	11 Mar	18 Mar
Cloud Computing - C3	27 Feb	11 Mar	18 Mar
Salesforce Administrator - C3	27 Feb	11 Mar	18 Mar
Back-end Web- C1	27 Feb	11 Mar	18 Mar
Front-end Web - C1	27 Feb	11 Mar	18 Mar
Data Analytics - C4	28 May	10 Jun	17 Jun
Cloud Computing - C4	28 May	10 Jun	17 Jun
Salesforce Administrator - C4	28 May	10 Jun	17 Jun
Back-end Web- C2	28 May	10 Jun	17 Jun
Front-end Web - C2	28 May	10 Jun	17 Jun
Data Analytics - C5	20 Aug	2 Sep	9 Sep
Cloud Computing - C5	20 Aug	2 Sep	9 Sep
Salesforce Administrator - C5	20 Aug	2 Sep	9 Sep
Back-end Web- C3	20 Aug	2 Sep	9 Sep
Front-end Web - C3	20 Aug	2 Sep	9 Sep







# Frequently Asked Questions

## **What is the criteria for being accepted?**

Accepted applicants are evaluated based on their entire application, including assessment scores and essay responses. While the outcome may not always meet expectations, we encourage self-reflection, identifying areas for improvement, and ongoing skill development. For future programme applications, please revisit our website during the next cycle.

## **I applied and received confirmation, but I haven't received an acceptance letter.**

The confirmed button in your email indicates your acceptance.

## **Are there any fees apart from the administration fee?**

The tuition fee for our programmes starts at \$7500. For sponsored applicants, this fee is waived, and only the administration fee is required.

## **I want a waiver or scholarship, and I am unable to pay the administration fee.**

Regrettably, we cannot accommodate this request presently. The administration fee supports programme access, study materials, community engagement, networking, and certification. Paying it demonstrates commitment and ensures access to all resources and support for success.

## **How do I make payment?**

All payments can be made via the admissions portal.

## **I accidentally dropped a programme, and now I can't continue the application.**

Unfortunately, dropped applications cannot be continued. You will need to apply to another programme or use a different email address.

