

Back-End Web Development Overview

6 months (20 hrs / week)

What is Back-End Web Development?

- A meticulously crafted 18-week journey designed to turn learners from novices into job-ready developers.
- Experience hands-on, practical learning for real-world application that covers essential web technologies, modern back-end frameworks, and key languages like Javascript, Node.js, and Python
- As a back-end developer, you're like the electrician of a website, ensuring the essential connections behind the scenes for proper functionality and contributing vitally to the success of digital platforms.

Why Back-End Web Development?

The relevance of the programme is highlighted by its alignment with the growing industry demand for skilled back-end developers, addressing the rising complexity of businesses and applications. With an industry-standard capstone project, learners receive expert mentorship from experienced software engineers and programme alumni, fostering a supportive learning environment and providing valuable industry insights.

Programme Objectives

- Basic proficiency in back-end languages like Python,
 Node.js, and Express.js
- Database management with SQL (e.g., MySQL) and NoSQL
 (e.g., MongoDB) databases
- REST API, Authentication, and other back-end concepts
- How to build a basic, functional web application from the ground up
- To problem-solve based on real-world scenarios

What makes this programme unique?

Hands-on Learning

The programme emphasises practical application through industry-standard project-based learning, enabling learners to apply theoretical knowledge directly to real-world scenarios for a deep understanding of concepts.

Mentor Support

Offers mentorship from seasoned engineers and alumni, providing valuable insights and support that enhance the learning journey with a direct link to real-world experiences and industry best practices.

Comprehensive Curriculum

Covering a broad spectrum of backend technologies and best practices ensuring participants develop a wellrounded skill set for job readiness.

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 Saturdays and ends by end of Thursdays
- **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 & Fundamentals of the web

Week 01 - Command Line Basics

Week 02 - Version Control

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 - Web framework and ORMs

Week 10 - APIs and Authentication

Week 11 - Introduction to Django and Basic Overview

Week 12 - Deepening Understanding of Django Models and Databases

Week 13 - Exploring Django Views, Templates, and Forms

Week 14 - Advanced Django Concepts

Week 15 - Building a Complete Django Application

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.



Get a professional portfolio and skills for better employability.



Gaining work ready skills

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



4

In a state-ofthe-art learning environment

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



With support from your peers.

Our alumni get access to our Fellowship community and events.



GET STARTED

apply now







www.alxafrica.com



2024 Calendar

Programme - Cohort #	Application Deadline	Onboarding Starts	Programme Starts
Data Science - C2	27 Feb	11 Mar	18 Mar
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	21 May	3 Jun	10 Jun
Cloud Computing - C4	21 May	3 Jun	10 Jun
Salesforce Administrator - C4	21 May	3 Jun	10 Jun
Back-end Web- C2	21 May	3 Jun	10 Jun
Front-end Web - C2	21 May	3 Jun	10 Jun



DISCLAIMER: Please be aware that the dates provided are subject to change and are intended as a reference for your planning purposes, please refer to the website for date confirmation.



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.

