

Creative IT Institute

Course Name:

Professional Web
Development with Python &
Django

Delivery Mode:

Online Theory + Recorded Video

Total Duration:

Course Duration: 6Months / 48 Classes

Class Distribution:

online Class: 48 Classes (Each Class: 02 Hours)

Total Project:

Hands-On 12+ Projects on Python and Django

Program Overview:

The Professional Python Django Development program is a hybrid learning experience designed to transform students into industry-ready backend and full-stack web developers. This four-month course blends core Python fundamentals, Django framework mastery, real-world project development, and modern API-based architecture. The program combines offline lab-based coding practice, live online theory sessions, and self-paced recorded classes to ensure flexibility, practical skills, and deep understanding for every learner.

Who It's For:

Aspiring Web Developers, Job Seekers, Freelancers, Entrepreneurs, Computer Science Students, Tech Enthusiasts, and Professionals looking to build scalable web applications, APIs, and backend systems using Python and Django.

Career Outcomes:

Python Developer | Django Developer | Backend Developer | Full-Stack Web Developer | API Developer | Software Engineer | Freelance Web Developer | Tech Entrepreneur

Software Taught:

Python: 11	OOP: 05	Django: 14
DRF: 9	Git & GitHub: 03	Docker & Deployment: 03
Exam: 3		

Class Structure:

Class Type	No. of Classes	Duration per Class
online (Theory)	45	2 Hours
Exam	03	2 Hours
Recorded Videos	10	Variable

Key Highlights:

- Python programming fundamentals & clean coding practices
- Django framework (Models, Views, Templates, ORM)
- REST API development with Django REST Framework (DRF)
- Authentication, Authorization, JWT & role-based access
- Database design with PostgreSQL & MySQL
- Real-world projects: Admin panel, APIs, CRUD systems
- Deployment basics, Git/GitHub & production-ready setup
- Freelancing & client-based project workflow training

Career Path:

Junior Python Developer | Django Developer | Backend Developer | API Developer | Full-Stack Web Developer | Freelance Web Developer | Software Engineer

Pre-Recorded Video List (Before Course Start):

1. Introduction to Python & Web Development
2. How the Web Works (Client, Server, HTTP, API)
3. Python Installation & Development Environment Setup
4. Basics of Programming Logic & Flow
5. Career Opportunities with Python & Django

Course Prerequisite:

- Basic knowledge of using a computer
- Desktop / Laptop (Windows / macOS / Linux)
- Stable Internet connection
- No prior programming experience required (Beginner-friendly)

Notes:

প্রতিটি **Online Theory class** লাইভে (Zoom / Team's) অনুষ্ঠিত হবে।

Lab classes-এ real-world Django project-এর hands-on coding practice, bug fixing ও mentor-guided correction দেওয়া হবে।

Course Outline Structure

1) Python Fundamentals

Duration: 11 Classes

Focus: Programming Basics, Logic Building & Clean Code Foundation

Class Type Breakdown

- Online Live Theory: 6 Classes
- Online Lab (Practice): 4 Classes
- Online Exam: 1 Class

Key Highlights

- Python syntax, variables & data types
- Conditions, loops & functions
- Lists, tuples, dictionaries & sets
- Error handling & debugging basics
- Problem-solving & logic building

Projects Included

- Calculator
- Number guessing game
- Small utility scripts

Career Path

- Python Junior Developer, Programming Assistant

Prerequisites

- None (Beginner-friendly)

	Class No	Class Type	Topic / Lesson	Resource Type
Python Programming	Class 1	Online Theory	Introduction to Python & Programming Basics	Class Video
	Class 2	Online Theory	Python Installation & Development Environment Setup	Class Video
	Class 3	Online Theory	Variables, Data Types & Operators	Class Video
	Class 4	Online Theory	Conditional Statements (if, else, elif)	Class Video
	Class 5	Online Theory	Loops (for, while) & Loop Control	Class Video
	Class 6	Online Theory	Functions & Code Reusability	Class Video
	Class 7	Online Theory	Lists, Tuples & Sets	Class Video

	Class 8	Online Theory	Dictionary & Data Handling	Class Video
	Class 9	Online Theory	String Manipulation & Built-in Functions	Class Video
	Class 10	Online Theory	File Handling & Basic Error Handling	Class Video
	Class 11	Online Theory	Python Fundamentals Exam (MCQ + Pract	Class Video

2. Object-Oriented Programming (OOP)

Duration: 05 Classes

Focus: Writing scalable & reusable Python code

Class Type Breakdown:

Online Live Theory: 3 Classes

Online Lab (Practice): 1 Class

Online Exam: 1 Class

Key Highlights:

- Class & object concepts
- Inheritance, encapsulation & polymorphism
- Real-world OOP use cases
- Code structuring best practices

Project Name:

Vector Cartoon	Landscape	Custom Letter	Logo	Business Card
Letterhead	Invoice	Envelope	Flyer	Bifold Brochure
Trifold Brochure	Desk & Wall Calendar	Certificate	Product Packaging	Label
Food menu	T-shirt			

Projects Included: 1 Project

Career Path: Python Developer, Junior Backend Developer

Prerequisites: Python Fundamentals

	Class No	Class Type	Topic / Lesson	Resource Type
Object Oriented Programming (OOP)	Class 1	Online Theory	OOP Concepts & Class Structure	NO
	Class 2	Online Theory	Constructor & Object Creation	NO
	Class 3	Online Theory	Inheritance & Polymorphism	NO
	Class 4	Online Theory	Encapsulation & Abstraction	NO
	Class 5	Online Theory	OOP Based Mini Project	NO

3.Django Web Development

Class Duration: 14 Classes

Focus: Backend Web Development with Django

Learn the art of photo editing, manipulation, and creative compositing with Adobe Photoshop. This segment combines technical skills with marketplace-based practical projects for real-world freelancing readiness.

Class Type Breakdown:

- **Online Theory:** 14 Classes

Key Highlights:

- Django project & app structure
- Models, Views, Templates (MVT)
- Django ORM & database integration
- Authentication & authorization
- Admin panel customization
- CRUD-based real-world applications

	Class No	Class Type	Topic / Lesson	Resource Type
Django Web Development	Class 1	Lab (Practice)	Django Overview & Project Setup	Class Video
	Class 2	Recorded Video	Django Project Structure	Class Video
	Class 3	Lab (Practice)	Apps, URLs & Views	Class Video
	Class 4	Offline (Theory)	Templates & Static Files	Class Video
	Class 5	Online Theory	Models & ORM	Class Video
	Class 6	Online Theory	CRUD Operations	Class Video
	Class 7	Lab (Practice)	Forms & Model Forms	Class Video
	Class 8	Recorded Video	Authentication & Authorization	Class Video
	Class 9	Lab (Practice)	Admin Panel Customization	Class Video
	Class 10	Lab (Practice)	User Management Project	Class Video
	Class 11	Online Theory	Middleware & Signals	Class Video
	Class 12	Lab		Class Video

		(Practice)	File Upload & Media Handling	
	Class 13	Lab (Practice)	Mini Django Project	Class Video
	Class 14	Offline (Theory)	Django Module Exam	Class Video

4. Django Rest Framework Api

Development

Class Duration: 14 Classes

Focus: API Development & Backend for Frontend

Learn the art of photo editing, manipulation, and creative compositing with Adobe Photoshop. This segment combines technical skills with marketplace-based practical projects for real-world freelancing readiness.

Class Type Breakdown:

- Online Theory:** 09 Classes

Key Highlights:

- REST concepts & API architecture
- Serializers & ViewSets
- JWT authentication
- Role-based access control
- API testing with Postman

	Class No	Class Type	Topic / Lesson	Resource Type
Django Rest Api Development	Class 1	Online Theory	REST API Concepts	Class Video
	Class 2	Online Theory	DRF Setup & Serializer	Class Video
	Class 3	Online Theory	API Views & ViewSets	Class Video
	Class 4	Online Theory	CRUD API Development	Class Video
	Class 5	Online Theory	Authentication (JWT / Token)	Class Video
	Class 6	Online Theory	API Integration Project	Class Video
	Class 7	Online Theory	Permissions & Throttling	Class Video
	Class 8	Online Theory	Real-world API Project	Class Video

	Class 9	Online Theory	DRF Exam	Class Video
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5. Git & GitHub

Class Duration: 3 Classes

Focus: Version Control & Team

Workflow

Learn the art of photo editing, manipulation, and creative compositing with Adobe Photoshop. This segment combines technical skills with marketplace-based practical projects for real-world freelancing readiness.

Class Type Breakdown:

Online Live Theory: 2 Classes
Online Lab (Practice): 1 Class

Key Highlights:

- Git basics & branching
- GitHub repository management
- Real-world collaboration workflow

Projects Included

- GitHub-hosted Django project

Career Path

Junior Software Engineer, Team Developer

	Class No	Class Type	Topic / Lesson	Resource Type
Git & GitHub	Class 1	Online Theory	Git Basics & Commands	Class Video
	Class 2	Online Theory	GitHub Workflow	Class Video
	Class 3	Online Practice	Live Project Repository Setup	Class Video

6. Docker & Deployment

Class Duration: 3 Classes

Focus: Production Deployment
 & DevOps Basics

Class Type Breakdown

- Online Live Theory: 2 Classes
- Online Lab (Practice): 1 Class

Key Highlights:

- Docker basics & containerization
- Dockerizing Django projects
- Deployment on VPS / Cloud
- Environment variables & security

Projects Included

- Live deployed Django API

Career Path

Backend Developer, DevOps-aware Developer

	Class No	Class Type	Topic / Lesson	Resource Type
Docker & Deployment	Class 1	Online Theory	Docker Basics & Containers	Class Video
	Class 2	Online Theory	Dockerizing Django Project	Class Video
	Class 3	Online Theory	Deployment on VPS / Cloud	Class Video

Final Exams & Projects

Duration: 3 Classes

Exam No Exam Type Description

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|---|---------------------------|----------------|
| 1 | Online Exam Python + OOP | Combined Exam |
| 2 | Online Exam Django + DRF | Practical Exam |
| 3 | Online Exam Final Project | Presentation |

Career Path

Python Developer | Django Developer | Backend Developer | API Developer | Full-Stack Developer | Freelance Web Developer | Software Engineer