



Python Django Full Stack Developer with React – Career-Ready Program

Welcome to the SDC Networks Full Stack Python Django Developer with React Course, a comprehensive program designed to transform aspiring developers into job-ready professionals. This brochure outlines our meticulously crafted curriculum, covering essential back-end, front-end, and deployment technologies. Join us to embark on a rewarding career in web development.

Mastering Python: The Foundation of Full Stack Development

Our course begins with a deep dive into Python, providing a robust foundation for all subsequent modules. We cover everything from the basics to advanced concepts, ensuring you gain proficiency in this versatile language.



Python Fundamentals

- Introduction to Python & IDE Setup
- Data Types, Operators, Input/Print
- Conditional & Looping Statements



String & Data Structures

- String Manipulation & Pattern Printing
- Lists, Tuples, Sets, Dictionaries
- List Comprehension



Modules & OOPs

- Files, Modules, & Packages
- Object-Oriented Programming (OOPs) Concepts
- Exception Handling & Functional Programming



Database Connectivity

- Python-MySQL Database Connection
- Hands-on database interaction

Front-End Essentials: Crafting User Interfaces

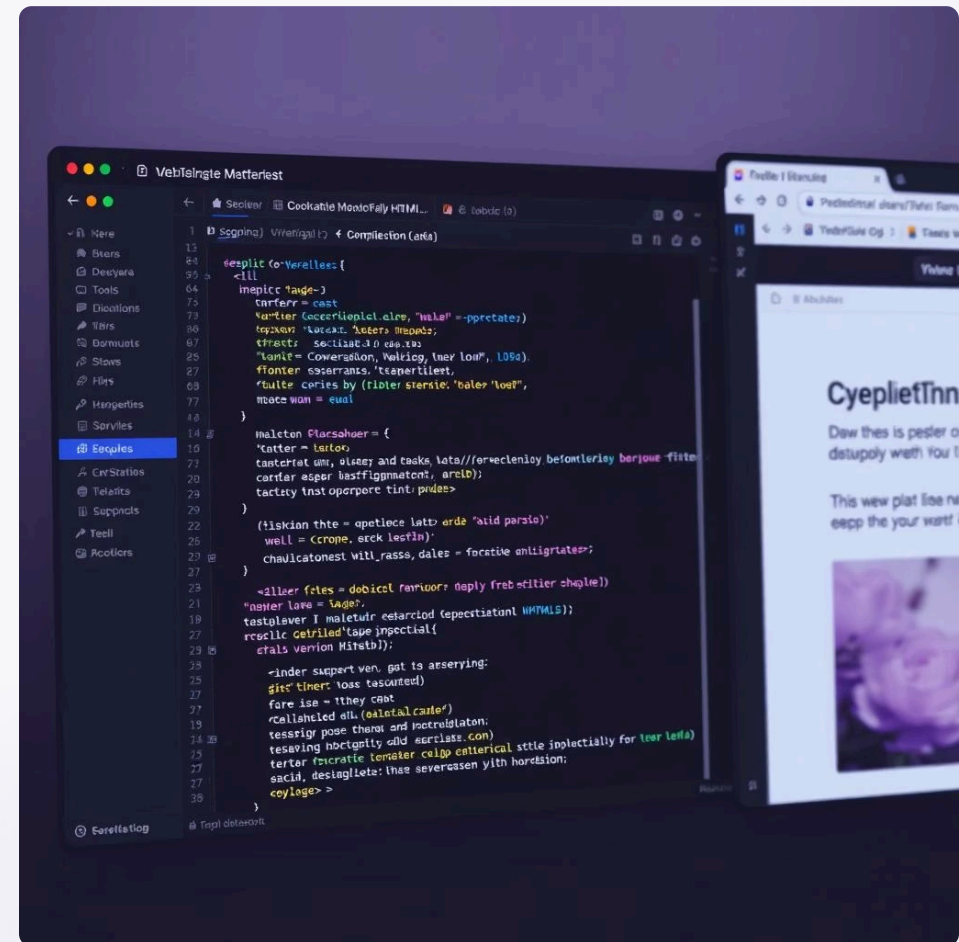
Build visually appealing and interactive web interfaces with our comprehensive front-end modules. Learn the core languages and frameworks that bring websites to life.

HTML & CSS

- Basic Tags & Structure
- Selectors, Properties, & Styling
- Responsive Design Principles

Bootstrap Framework

- Adding Bootstrap to Projects
- Utilizing Predefined Classes for Rapid Development



JavaScript & jQuery

- Event Handling & Form Validation
- jQuery Effects & DOM Manipulation
- AJAX & JSON for Asynchronous Data Transfer

React JS: Building Dynamic Single-Page Applications

Dive into React.js, the leading library for building modern, scalable single-page applications. Master component-based architecture and state management for dynamic user experiences.



React Core

React Setup & Key Features, JSX Syntax, Class & Function Components



Modern JavaScript (ES6)

let/const, Arrow Functions, Spread Operator, Destructuring



UI & Interaction

Component Styling, Form Handling, Event Management



React Hooks

useState for State Management, useEffect for Side Effects



Navigation & Data Fetching

React Router for SPA Navigation, REST APIs with Fetch & Axios

Django Framework: Powering the Back-End

Explore Django, the high-level Python web framework that encourages rapid development and clean, pragmatic design. Learn to build robust and secure web applications.

- **Environment Setup:** Virtual Environment & Django Project/App Structure
- **Core Concepts:** Views, URLs, Templates, Models, ORM Queries
- **Template Management:** Template Inheritance, Static Files Integration
- **Forms & Validation:** Django Forms, Model Forms, Data Validation
- **Class-Based Views (CBVs):** Create, Update, Delete, Detail, Template Views
- **Advanced Features:** Authentication System, Email Integration, Image Handling
- **User Management:** Custom User Model
- **Database Connection:** Django-MySQL Integration
- **API Development:** Django REST Framework (DRF) for building powerful APIs



Hands-On Projects: Building Real-World Applications

Apply your knowledge through practical project work. Our curriculum emphasizes hands-on experience, allowing you to build a strong portfolio and understand the full development lifecycle.

Mini CRUD Project

Develop a basic Create, Read, Update, Delete (CRUD) application. This project consolidates your understanding of database interactions and fundamental web operations in both front-end and back-end contexts.

- Database Schema Design
- API Endpoint Creation
- Front-End User Interface for CRUD operations

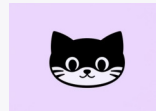
Major Full Stack Project

Undertake a significant project integrating Django (Python) for the back-end and React for the front-end, with MySQL as the database. This culminating project demonstrates your ability to build a complete, scalable web application from scratch.

- Complex Data Modeling
- User Authentication and Authorization
- Rich User Interface with Advanced React Features
- Deployment-Ready Application

Tools & Deployment: From Code to Live Application

Beyond coding, understand the essential tools and processes for version control and deploying your applications to the web, making your projects accessible to the world.



- **Git & GitHub Mastery**

Learn version control with Git and collaborate effectively using GitHub. Understand branching, merging, and pull requests to manage your code.

- **Project Versioning**

Best practices for uploading and managing your projects on GitHub, ensuring code integrity and collaboration readiness.

- **Web Deployment with Vercel**

Deploy your full-stack applications effortlessly. Master the process of taking your web projects live using modern deployment platforms like Vercel.

Why Choose SDC Networks?

At SDC Networks, we are committed to providing an exceptional learning experience that prepares you for a successful career in full-stack web development. Our program offers:



Industry-Relevant Curriculum

Designed to meet current industry demands, ensuring you learn the most sought-after skills.



Hands-On Learning

Focus on practical application with numerous coding exercises and real-world projects.



Expert Instructors

Learn from seasoned professionals with extensive experience in Python, Django, and React.



Career Support

Guidance on portfolio building, interview preparation, and job placement assistance.

Ready to kickstart your career as a Full Stack Developer? Enroll with SDC Networks today!