



# Django Introduction

**Course #:** PY-200      **Duration:** 5 days

## Prerequisites

None.

## Details

You can use Python for web development, and a popular framework like Django makes it easy. Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source.

This course teaches Django from the beginning. You will learn how to use Django to handle all aspects of web development, including handling requests and responses, rendering dynamic HTML pages with templates, and making database access and data management easy.

## Software Needed

Python 3 or higher

Django

## Outline

- **Setup and Installation**
  - Python and Django Installation and Setup
  - Changing Port
  - Installing code Editor (Atom) and Required Packages
- **Django Fundamentals**
  - Installing Fresh Project
  - Project Structure of Django
  - How Django Works
  - URL & Views in Django
  - Data Pass on HTTP Response
  - How to Create Apps in Django
  - Apps Links to Main Project
  - Templates on Django
  - Bootstrap on Django
  - Template Inherit in Django
  - URLS Pattern in Django
  - Include Method in Django
  - Rendering Context in a Template
  - For Loop in Django Template

- Static Files Links on Django
- Load Bootstrap Template on Django
- Template Mastering in Django
- SuperUser Creation in Django
- Root Apps Change on Django
- Models in Django
- Migrate & Migrations in Django
- Data Show on Admin Panel
- Media File in Django
- Data Show on Frontend
- Slider Dynamic in Django
- Client Section Dynamic in Django
- Contact us Page in Django Project
- Data Insert Into Database in Django
- Login Page in Django
- Forgot Password in Django
- Registration Page in Django
- Login System on Django
- Logout in Django
- Message Framework of Django
- Registration in Django
- **Django Project and Application**
  - Creating and Running New Project
  - Django Application
- **Views, URLs, Templates**
  - View and URL
  - View and URL (More Examples)
  - URL Mappings
  - Templates
  - Static Files
- **Django Models**
  - Models Overview
  - Creating Models
  - Model Objects
  - Admin Site
  - Models (More Examples)
  - Views Templates Models
- **Django Forms**
  - Form with HTML
  - Creating a Django Form
  - Form Submission
  - Some Form Fields Example
  - Form Validation
  - Django Model Forms
- **Template Filter and Inheritance**
  - Relative URLs
  - Template Inheritance
  - Built-In Template Filters
  - Custom Filters
- **CRUD Using MySQL**
  - Connecting to a MySQL Database
  - Create Migration in a MySQL Database
  - Creating Templates and Views
  - Entry Forms
  - Dynamic Template
  - Update Data
  - Delete Records Album
  - Delete Records Artist
- **User Authentication**
  - Django Provided User Model
  - Setup New Project and Admin

- Using Built-in User Model
- Creating Registration Form
- Register User
- User Login
- **Class-Based View**
  - Template View
  - List View
  - Detail View
  - Create View
  - Update View
  - Delete View
- **Developing a Blog with Django**
  - Blog Project Introductions
  - Setting up a Project
  - Creating Models
  - URL, View, and Template for Blog
  - User Sign Up
  - User Login and Logout Page
  - User Profile
  - Navigation Bar
  - Write Blog
  - Blog Homepage, Blog Details Page, and Blog Comments
  - Like/Unlike
  - My Blog Page
  - Edit Blog Post
- **Developing a Social Media Website with Django**
  - Social Media Project Introduction
  - User Sign Up
  - User Login
  - User Profile
  - Models
  - Edit Profile
  - Post Photos
  - Home Page
  - Follow/Unfollow
  - Display Posted Images
  - Like and Unlike Images
- **Developing an eCommerce Website with Django**
  - Ecommerce Project Introduction
  - Project and App Setup
  - Custom User Model
  - User Sign Up
  - Update User Profile Page
  - Messages Setup
  - Product Model
  - Homepage and Navbar
  - Product Details Page
  - Cart and Order Model
  - Cart View
  - Cart Template
  - Increase and Decrease Quantity
  - Checkout Page
  - Payment Gateway
  - Complete Payment
  - Order Page