



Django Course Training Curriculum

STRUCTURE



Django Course Training

About Croma Campus:

Croma Campus Training & Development Private Limited is an education platform since 2010 providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty and industry.

- Hands-On Live Projects
- Simulation Test Papers
- Industry Cases Studies
- 61,640+ Satisfied Learners
- 140+ Training Courses
- 100% Certification Passing Rate
- Live Instructor Classroom / Online Training
- 100% Placement Assistance

Croma Campus Training Program Deliverables:

- **Session Recordings** - Original Class Room Voice & Video Recording
- **Training Material** - Soft Copy Handbooks
- **Assignments** | Multiple Hands-on Exercises
- **Test Papers** - We provide **Practice Test** as part of our course to help you prepare for the actual certification exam.
- **Live Case Studies**
- **Live Projects** - Hands-on exercises and Project work. You will work on real time industry-oriented projects and assignments for each module to practice.
- **Key focus on Hands-on exercises and Project work.** You will work on real time industry-oriented projects.
- Faculty with more than **10+ Years of Experience** in the Industry.
- **Technical Resume Designing & Job Assistance:** With more than 100+ Clients across the Globe and we help learners to get a good job in their respective field. We also help learners with resume preparation.
- **Interview Q&A**
- **About Croma Campus Training Certificate:** Croma Campus will provide you with an industry-recognized (Certified by **ISO 9001:2015 & E-Cell IIT Jodhpur**) course completion certificate, which has lifelong validity.

How I unlock my Croma Campus Certificate: Attend Complete Batch & Submit at least One Completed Project.

Django Course Training Description:

- Croma Campus's Django course helps you gain expertise in Django REST framework, Django Models, Django AJAX, Django jQuery etc. You'll master Django web framework while working on real-time use cases and receive Django certification at the end of the course.

Django Framework Course Content:

Module 1: Introduction to Django Web Framework:

- **Goal**
 - In this module, you will be introduced to Django and learn how to create views and perform URL mapping
- **Objective:**
 - Explain Web Framework
 - Explain MVC pattern
 - Create a basic Django app
 - Create Views
 - Use HTTP request and response objects
 - Use URLConf
- **Topics:**
 - Web development
 - Introduction to Django Web Framework
 - Features of Django
 - Installing Django
 - MVC model
 - HTTP concepts
 - Views
 - URL Mapping
- **Hands On/Demo:**
 - Create a simple View using Django

Module 2: Templates and Forms:

- **Goal:**
 - In this module, you will learn how to create Templates and Forms in Django
- **Objective:**
 - Explain the Django Template System
 - Load Template Files
 - Render Templates
 - Create Forms
 - Process Form Data
 - Customize Form Field Validation
- **Topics:**
 - Django Template Language
 - Utilities of Templates
 - Creating Template Objects
 - Tags, Variables and Filters
 - Rendering Templates
 - Template Inheritance
 - Form Handling
 - Form validation and Error Messages
 - Form Display

- **Hands On/Demo:**
 - Create a Form that accepts personal data to from a user

Module 3: Models and Dynamic Webpages:

- **Goal:**
 - In this module, you will learn how to create Database Models and add Dynamic content to your webpages
- **Objective:**
 - Define Database Models
 - Use Model Fields
 - Populate a Database, CRUD
 - Use QuerySets for data retrieval
 - Use jQuery and AJAX with Django to create Dynamic websites
- **Topics**
 - Django Models
 - Model Fields
 - Model Inheritance
 - CRUD on DB
 - Primary keys and the Model
 - Dynamic Webpages
 - Toggle Hidden Content
 - jQuery and AJAX integration
- **Hands On/Demo:**
 - Adding a Like button to a webpage

Module 4: Serialization:

- **Goal:**
 - In this module, you will learn how to serialize and deserialize data and create APIs
- **Objective:**
 - Explain Data Serialization
 - Use Django's REST Framework
 - Use Serializers and Deserializers
 - Use Model Serializers
 - Use REST APIs
- **Topics**
 - Serialization and Deserialization
 - Django REST Framework
 - Serializer class
 - Model Serializers
 - REST APIs
- **Hands On/Demo:**
 - Creating a REST API

Module 5: Parsing XML and JSON with Python:

- **Goal:**
 - A stored in XML & JSON formats using Python
- **Objective:**
 - Explain XML and JSON file formats
 - Explain XML-RPC
 - Parse data stored in both XML and JSON formats
 - Stores data in XML and JSON formats
- **Topics:**
 - XML-RPC
 - XML, parsing object to XML and back
 - JSON, parsing object to JSON and back
- **Hands On/Demo:**
 - Parse data stored in XML/JSON format to native Python type and vice-versa

Projects:

- **What are the system requirements for this course?**
 - The course has no special hardware requirements. It only requires a VM software (preferably VirtualBox) with an image of the Ubuntu OS in which Django 1.11 and Django's REST framework are installed. 4 GB Ram will be recommended.
- **How will I execute the practicals?**
 - All practicals will be executed within the VM where an image of the Ubuntu OS in which Django 1.11 and Django's REST framework are installed and the solutions should be uploaded for evaluation. In case if you face any issues, we have 24x7 Expert Support to help you with your queries.
- **Which case-studies will be a part of the course?**
 - Trainer will give you a project and following actions must be performed in order to complete this task:
 - Create a Django project and an app within the project
 - Design the right model for storing user and poll data
 - Create the right views for viewing polls and poll results
 - Optimize code using the Django template system