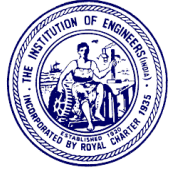




# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)  
Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. Telangana, India



## INFORMATION TECHNOLOGY DIVISION



### CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME

## Web Development Using Python Django & PostgreSQL

21 - 25 Oct 2024 (Classroom Training)

### Introduction

Python Django is a web framework that allows to quickly create efficient web pages. It speeds up the development process as you don't have to write code from the scratch. This platform provides advanced functionality like authentication, app management, upload support, and more

### Objective

To develop effective web applications using Python Django & PostgreSQL

### Course Coverage

#### Introduction about Python Django

#### Working with HTML 5 & CSS

#### JavaScript

#### Introduction to Python Programming

#### Getting Started with Django

- Installing Python
- Creating Python Virtual Environment
- Setting up Visual Studio Code
- Create Django Project
- Django manage.py File
- Django Project Structure

#### • Introduction Django Admin Panel

#### Django Basics

- Introduction Django Apps
- Working With Django Views
- Django Templating
- Expanding main.html Template File
- Loading Static Assets Django
- Extending Templates & Template Blocks
- Finishing Main Page HTML

#### Django Authentication

- Create Users Django App
- Creating Profile Model
- Django Admin Register Model
- Working With Django Signals
- Adding Location Data To Profile
- Automate Location Model Creation
- Working With Media Files Django
- Adding Login View, Forms In Django
- Logging User Into Django App
- Working With Django Messages
- Creating Register View
- Django Class Based Views
- Implementing Registration Logic
- Fixing Minor Bugs
- Implementing Header & Logout Features
- UUID Fields & ForeignKey Relationships
- Listing Model, Adding Listing Data
- Adding Section Header HomePage

- Include Django Templates
- Creating List View, Django Custom Forms
- Django Handling Form Data, Django Filters
- Django URL Parameters
- Read Only Fields Django Admin
- Challenge Video
- URL Parameters Django Templates
- Displaying Additional Listing Data
- Decorate Class Based Views
- Displaying Data Within Forms
- Saving Data Profile Page
- Django Filter Model QuerySet, Adding Edit Page

#### Advanced Django Concepts

- Custom Form Widgets
- Create LikedListing Model
- Show Liked Listings
- Django Shortcuts & JSON Response
- Django Asynchronous Operation
- Django Environment Variables
- Configuring Email Service Django
- Send Email In Django

#### Introduction to PostgreSQL

- Creating and Modifying Tables
- Modifying Data in the table
- Querying Data, Filtering Data
- PostgreSQL Data types
- Modifying Table Structures, Add constraints
- Conversion Functions

#### Deploying Django App to Production

- Connecting Django To PostgreSQL Database
- Connecting Storage Bucket To Django
- Django App Deployment Modes
- Django Static File Serving
- Unicorn Production Server
- Deploy Django App To Heroku
- Fixing Static Files Issue
- Verifying App Functionality, Fixing Bugs

(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

## Methodology

Methodology of the programme includes class room sessions with Lecture / Discussion with Hands- on Practical, with tools, audio visual aid, bench marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences etc. All the sessions will be interactive demanding active participation from all the members

## Target Participants

- Professionals working in the field of software development, Web Administrators, Programmers, Application Developers, Web developers in IT departments.
- IT Managers, Systems Managers, Scientists, Engineers and Consultants working in governmental, defense, public, private sector organizations.
- Professors, Faculty and Technical staff of Engineering and MCA colleges who would like to gain knowledge and expertise in web technologies.

## Programme Dates & Timings

Venue: At ESCI Campus Hyderabad

Dates: 21 – 25 Oct 2024

Session timings will be from 10:00 – 17:00 hrs with 01 Hour Lunch break & 15 Minutes Tea break..

## Course Director

Mr. Syed Azgar , MBA(IT), RHCE, MCSA

Sr Faculty & Head IT,

Information Technology Division,

Engineering Staff College of India, Hyderabad.

## Course Fee for Offline Training

- ₹ 27,500/- (Residential Fee) per participant. Fee includes Single AC accommodation, course material, course kit, Breakfast. Lunch, Dinner, Tea / Coffee and Snacks during the actual days of the training program.

GST @18% is to be paid extra and above the training fee as training. PAN Card No. AAATT3439Q. GST No: 36AAATT3439Q1ZV, HS No.: 999293 (under commercial training or coaching services – clause 65(105) (ZCC) of Finance act – 1994).

**Note: 18% GST Extra** (GST Nil for All State & Central Govt. Departments like DRDO, DGQA & Other Govt. Departments).

Programme fee is to be paid in in favour of “THE INSTITUTION OF ENGINEERS (INDIA) – ENGINEERING STAFF COLLEGE OF INDIA” by **Electronic Fund Transfer (EFT)** to ESCI – Axis Bank A/c No. 912010049234564 with The Axis Bank Ltd, Old Mumbai Hwy, Cyberhills Colony, P Janardhan Reddy Nagar, GachiBowli Hyderabad-500032 by NEFT/ RTGS/ IFSC Code No. UTIB 0000733 – MICR No.500211020. **While using EFT method of payment, please ensure to communicate us your company name, our invoice reference and programme title.**

## Registration

Online registration shall be available on ESCI web portal : <http://www.escihyd.org/index.php/it-upcoming-trainings>

To register manually please send your nominations giving details of name, designation, contact address, email address, mobile no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to : [it@escihyd.org](mailto:it@escihyd.org)

A Certificate of participation will be awarded to each participant on conclusion of the programme

**Information Technology Division, Engineering Staff College of India**

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