

Learn Python Programming – Shape Your Future with Code!

 The Most In-Demand Language of the 21st Century

Career Opportunities with Python

- ▶ Python Developer
- ▶ Web Developer (with Django/Flask)
- ▶ Data Analyst / Data Scientist
- ▶ AI / ML Engineer
- ▶ Automation Tester
- ▶ Cybersecurity Analyst
- ▶ Backend Developer

Key Benefits

- ✓ Learn from experts
- ✓ Practical implementation
- ✓ Regular assignments
- ✓ Boost problem-solving skills
- ✓ Project based training
- ✓ Interview Preparation



matplotlib



CONTACT US



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1. File Handling & Data Processing

- Advanced File Operations
- CSV File Handling (Read, Write, Append, Edit)
- JSON Processing
- XML Parsing
- HTML Parsing with BeautifulSoup
- Pickle Module (Serialization & Deserialization)

2. Regular Expressions (Regex)

- Match and Search Functions
- Pattern Groups and Named Groups
- Flags and Advanced Matching
- Practical Applications in Data Validation

3. Advanced Functions & Data Structures

- Lambda Functions, Map, Filter, and Reduce
- List, Dictionary & Set Comprehensions
- Decorators and Closures
- Generators and Iterators
- Date and Time Handling

4. Networking & APIs

- **REST API Basics**
 - Understanding REST Architecture
 - HTTP Methods (GET, POST, PUT, DELETE)
- **Making API Calls using requests Module**
 - Fetching Data from Public APIs
 - Handling JSON and XML Responses
- **Authentication in APIs**
 - OAuth and JWT Authentication
 - Securing API Endpoints
- **Building APIs using Flask and Django**
 - Creating RESTful APIs with Flask
 - Implementing Django REST Framework (DRF)
 - API Authentication & Authorization
 - Deploying APIs

5. Web Development with Flask

- Introduction to Flask
- Setting Up Flask Environment
- Routing and URL Mapping
- HTTP Methods (GET, POST, PUT, DELETE)
- Templates with Jinja2
- Flask Form Handling (WTForms)
- Database Integration with Flask-SQLAlchemy
- Authentication & Authorization
- Session and Cookies Management
- Building REST APIs with Flask
- Deploying Flask Applications

6. Web Development with Django

Django Core Concepts

- Introduction to Django & MVC Pattern
- Setting Up Django Environment
- Django Project Structure
- Django Views & URL Mapping
- HttpRequest & HttpResponse
- 404 Errors and Error Handling

Django Models & Database Management

- Defining Models & Fields
- Database Migrations
- Querying Data with ORM
- Inserting, Updating & Deleting Data
- Filtering & Ordering Data

Django Templates & Forms

- Template System & Template Tags
- Context & Template Rendering
- Django Forms & Form Validation
- Handling GET & POST Requests

User Authentication & Security

- User Authentication System
- Login, Logout & Password Management
- Django Authentication Decorators
- Session & Cookies Management

Django Class-Based Views (CBVs)

- Understanding Class-Based Views
- CreateView, ListView, DetailView, UpdateView, DeleteView

Django REST Framework (DRF)

- Introduction to Django REST Framework
- Serializers & Views in DRF
- Authentication & Permissions
- **Building & Deploying RESTful APIs with Django**

Advanced Django & Deployment

- Pagination (Function-Based & Class-Based)
- Caching & Performance Optimization
- Deploying Django Applications (Heroku, AWS, DigitalOcean)

7. Command Line & Automation

- Command Line Arguments with argparse
- Automating Tasks with Python Scripts
- Working with Cron Jobs & Task Scheduling

ASSIGNMENTS / OBJECTIVES / PROJECT WORK

Master Programming

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 Learn. Code. Succeed.

OFFLINE CLASSES (IN-PERSON)

- Interactive classroom sessions
- Personalized mentorship
- Real-time problem solving

ONLINE CLASSES (LIVE SESSIONS)

- Attend from anywhere in the world
- Live doubt-clearing sessions
- Full access to assignments & notes
- International time zone flexibility

WHY CHOOSE US?

- Industry-aligned curriculum
- Experienced and certified trainer
- Real-world projects and assessments

DATA STRUCTURES

MACHINE LEARNING

**INTERVIEW
PREPARATION**

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ANGULARJS