



Python Backend Development

Content

&

Curriculum



Backend Development

Python

Introduction to Python
Python for Data Manipulation
Improve performance



SQL

Introduction to MYSQL
Advance SQL



Advanced DSA

Data Structures and Algorithms
Linked List
All Sorting Algorithms



Django

Intro to Postman and Django
Django Settings
Models, Shell
Advanced Concepts of Django



Job ready Here

Programming with Python

Python is a popular and powerful programming language used extensively for backend web development. Its versatility, simplicity, and rich ecosystem of libraries make it an excellent choice for building robust and scalable web applications

Python

7 WEEKS

1. VARIABLES, EXPRESSIONS AND STATEMENTS
2. FUNCTIONS, ITERATIONS, STRINGS
3. CONDITIONALS AND LOOPS
4. LISTS, DICTIONARIES, TUPLES
5. FILES HANDLING & OPERATIONS
6. OOPS
7. DATA HANDLING
8. DATA MANIPULATION WITH NUMPY
9. DATA ANALYSIS WITH PANDAS

2 Mentorship Session in a Week



Assignments
&
Projects

8 Assignments & 2 Projects

Learning SQL

SQL (Structured Query Language) is a specialized language used for managing and manipulating relational databases. As the backbone of backend data storage and retrieval, SQL plays a crucial role in web development

Introduction to MYSQL

2 WEEKS

1. MYSQL INSTALLATION
2. GETTING STARTED WITH SQL AND QUERIES
3. QUERIES WITH CONSTRAINTS
4. DDL STATEMENTS, DML STATEMENTS
5. JOINS IN SQL
6. QUERIES WITH AGGREGATES

2 Doubt Clearing Session In a Week



Projects
&
Assignments

5 Assignments

DSA Advanced

Step into the realm of DSA Advance, where algorithms evolve into supercharged warriors, conquering the most formidable coding challenges with unmatched finesse. Unleash the hidden potential of your code, harnessing the strength of advanced data structures, and witness your programs transcend the ordinary, blazing a trail of digital brilliance!

Topics To Cover

4-6 WEEKS

1. LINKED LIST
2. STACK
3. QUEUE
4. HASH TABLE
5. TREE
6. GRAPH
7. HEAP
8. SORTING ALGORITHMS

2 Practice Session In a Week



Project
&
Assignments

10+ Assignments & 2 Projects

Django

Master Django web development essentials with our student-friendly course! Explore building dynamic web applications using Django, a powerful Python web framework. Learn about database integration, URL routing, template rendering, and user authentication.

Django

5 WEEKS

1. INTRO TO POSTMAN AND DJANGO
2. DJANGO SETTINGS, MODELS, SHELL
3. ORM
4. DJANGO ADMIN, MIDDLEWARE, REQUEST-RESPONSE CYCLE
5. ADVANCED CONCEPTS OF DJANGO
6. UNIT TESTING AND DJANGO SETTINGS
7. CLASS-BASED VIEWS AND AUTHENTICATION

Live Classes 3 Days In a Week



Project
&
Assignments

7 Assignments & 2 Project