



The Legend package is ideal for students who want to learn from the basics, build complex application and build careers in software development.

## PYTHON WITH DJANGO

15+ Yrs | 72 Classes | 6 Months | 50 Minutes | Certificate of Achievement

Learn to build applications using Python with Django, a high-level Python web framework that encourages professional and rapid application development.

- Coding Skills
- Standards
- Rapid & Complex App Development

### LESSON PLAN

S.No	Topic	Class	Project
1	Introduction to Python	Basic Concepts	
2	Introduction to python	Getting started with repl.it	Repl.it
3	Introduction to variables	Python Data Types, Python Numbers, Python Casting, Python Booleans	Basics of python
4	Python Strings	String Programming: writing code for removing, changing and adding characters in string	String Calculator
5	Python Operators	Students learn operators in python	Quiz program
6	Python Lists	To check if list is empty, clone list, printing list after removing specific characters	Lists
7	Python Tuples	Creating tuples, computing sum of all elements in tuples, converting tuple of positive integers to integers, sort the tuple, remove empty tuple	Tuples
8	Python Sets	Min and max of the set, length of set, checking elements in set, removing intersection	Python sets
9	Python if..else	Students learn conditionals and its application in python	Sum of two given integers.
10	Python while Loops	Students learn loops and the application of while loop	Guess the number game
11	Python for loop	Students learn loops and the application of for loop	Sum of integers
12	Python Functions	Students learn about functions and how to create functions.	Fibonacci series
13	Python Lambda, Arrays	Finding index position, sorting a list, counting occurrences, find max min of tuples using lambda	Cumulative score calculator
14	Python Dates	Display the various Date Time formats - to convert a string to datetime.	Leap year determinator
15	File handling	Students are introduced to the concept of file handling	CSV file project
16	Basics of Artificial Intelligence	Introduction to AI	
17	Machine Learning & DataScience	Introduction to Machine Learning and Data Science	
18	Python for Data Science	Learn how python as a language assist best practices of data sciences	
19	Data Visualization in python	Introduction to data visualization in python	
20	Linear Regression	Learn Linear regression with Pynum and python	
21	Linear regression project	Student project on linear regression	Project
22	Introduction to python web development with Django	login system, database connection and CRUD operations	
23	Django URLs	Learn basics of Django URLs	Tennis club
24	Django Models	Learn how to create table in database	Tennis club
25	Django Data Manipulation	Learn to insert, delete and update data	Tennis club

\*Lesson plan indicates the topics and projects and should not be read as topics covered per class. Not all projects are listed.