



Email : [learn@devdesignhq.com](mailto:learn@devdesignhq.com)

# Curriculum

Python Bootcamp

Duration: 8 Weeks

Starting Date: March 14, 2025

Pre-requisites: Nil

# Table of Contents:

- Introduction
- Curriculum

# Introduction

Whether you are seeking to become a software developer or AI/ML engineer, this curriculum is designed to equip you with the essential skills and knowledge to excel in today's competitive market.

# Curriculum

## Bootcamp Overview:

- Live Classes: Friday, Saturday, Sunday ( 7-10 pm Nigeria Time)
- Duration: 8 Weeks
- Group Coding Sessions: Thursday, Friday

Week	Topics/Activities
1	Introduction ( IDE and setup ), Data types and variables, Basic syntax, Input / Output, operations, Control Flow, Functions. PT. 1, Tuples , sets, dictionaries
2	Iterations using loops, Functions Pt. 2 ( scope, arguments, merging functions with conditionals ), File handline ( open, read, write ), Working with directories and paths, OS module
3	Advanced file system management and operations, Introduction to Libraries in python, Math , Datetime and other important libraries, Introduction to PIP & Venv
4	Introduction to Numpy, Data handling with pandas, Data aggregation and grouping, Matplotlib basics, Advanced matplotlib, Introduction to seaborn

5	Understanding the difference between AI, ML, and Deep Learning. Key machine learning concepts: datasets, features, target. Preparing data for machine learning. Building simple models, Revisiting basic python concepts that need a recap.
6	Introduction to scikit learn, Build a simple ML model (e.g., house price prediction), Train and test the model, Interpret results and improve accuracy, Introduction to functional and OOP python.
7	Functional and OOP programming in python, Methods, inheritance, etc. Projects using Python
8	Capstone Project