**Programming Basics and Logic**

* Basic syntax & Control flow
* Conditions & Loops
* Functions
* Recursion
* Exceptions
* Scope

###### Object Oriented Programming

* Classes and Objects
* Encapsulation and Mangling
* Inheritance, Polymorphism
* Modules and Packages

###### Data Structures and Algorithms

* Arrays & Strings
* Dictionary, Set, Tuple
* Stack, Queue, LinkedList
* Trees & Heaps
* Hash Tables
* Algorithms and Complexity

###### Functional Programming

* Lambda functions
* map, reduce, filter, sort
* Declarative vs Imperative programming
* List Comprehension
* Decorators
* Unpacking
* Files (csv, json, xml, pdf, zip)
* Essential modules (time, random, os, sys...)
* Data science (numpy, pandas...)
* Graphs and Plots
* Intro to Machine Learning
* Django or Flask
* Web APIs
* Web scraping & crawling
* Web automation
* Web sockets
* Git Essentials
* Cloud server deployment
* Desktop Calculator
* Chatting Web App
* Recognize Handwritten Digits