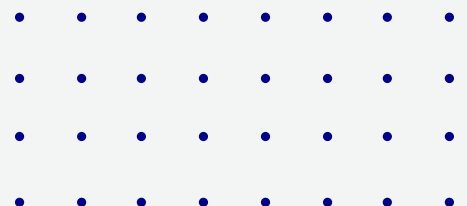
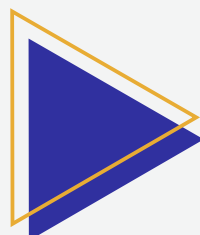


PYTHON CERTIFICATION COURSE



Lesson 01**Python Basics**

- 1.1 Course Introduction
- 1.2 Learning Objectives
- 1.3 Introduction to Python and It s Features
- 1.4 Python Introduction - Uses and Flavours
- 1.5 Python Introduction - Why Python
- 1.6 Software Installation and Environment Setup
- 1.7 Demo: Software Installation and Environment setup
- 1.8 Data Types
- 1.9 Input Output Functions
- 1.10 Demo: Data Types and Input Output Functions
- 1.11 Key Takeaways

Lesson 02**Data Operations**

- 2.1 Learning Objectives
- 2.2 Data Type Conversion
- 2.3 Arithmetic Operators
- 2.4 Comparision Operators
- 2.5 Assignment Operators
- 2.6 Bitwise Operators
- 2.7 Demo: Data Operations
- 2.8 String Methods
- 2.9 Demo: String Operations
- 2.10 List Methods
- 2.11 Demo: List Operations
- 2.12 Tuple Methods
- 2.13 Demo: Tuple Operations
- 2.14 Sets Methods
- 2.15 Dictionary Methods
- 2.16 Demo: Dictionary Operations
- 2.17 Key Takeaway

Lesson 03**Conditional Statements and Functions**

- 3.1 Learning Objective
- 3.2 Expressions
- 3.3 Conditional Statement
- 3.4 Demo - Conditional Statement
- 3.5 Loops - for loop
- 3.6 Loops - while loop
- 3.7 Demo - Loops
- 3.8 Functions
- 3.9 Demo - Functions
- 3.10 Key Takeaway

Lesson 04**Error Handling and File Operations**

- 4.1 Learning Objective
- 4.2 File Handling
- 4.3 Demo - File Handling
- 4.4 Errors
- 4.5 Exceptions
- 4.6 Demo - Errors and Exceptions
- 4.7 Logging
- 4.8 Demo - Logging
- 4.9 Python Debugger(Pdb Module)
- 4.10 Demo - Python Debugger
- 4.11 Objects and Classes
- 4.12 Objects and functions
- 4.13 Demo - Object Oriented Programming
- 4.14 Key Takeaway

Lesson 05**Shell Scripting and Django**

- 5.1 Learning Objective
- 5.2 Shell Scripting
- 5.3 Sys, OS and Sub-Process module
- 5.4 Reading Writing Files and Working with Date-time Module
- 5.5 Demo - Shell Scripting in Python
- 5.6 Web Scrapping
- 5.7 Demo - Web Scrapping using Beautiful Soup
- 5.8 Django - Intro and Architecture
- 5.9 Demo - Django Installation
- 5.10 Key Takeaway

Lesson 06**Logging Infrastructure**

- 6.01 Learning Objectives
- 6.02 Introduction to Python Logging
- 6.03 Concepts of Python Logging
- 6.04 Changing the Format of Logs
- 6.05 Python Logger
- 6.06 Using Python Logging
- 6.07 Logging Handlers and Formatters
- 6.08 Logging Flow
- 6.09 Configuring Logging
- 6.10 Extending Logging
- 6.11 Buffering Logs
- 6.12 Logging Best Practices
- 6.13 Rotating Log Files
- 6.14 Logging to a File
- 6.15 Summary



Lesson 07

Unittest Infrastructure

- 7.01 Learning Objective
- 7.02 Introduction to Unit Testing
- 7.03 Introduction to Unittest Framework
- 7.04 Concept of Unittest Framework
- 7.05 Command Line
- 7.06 Python Unittest
- 7.07 Using Python Unittest
- 7.08 Testing for Exceptions
- 7.09 Test Fixtures
- 7.10 Python Assertions
- 7.11 Classes and Functions
- 7.12 Pros and Cons
- 7.13 Mock object library
- 7.14 Summary

Lesson 08

Networking Concepts

- 8.01 Learning Objective
- 8.02 Introduction to Python Networking
- 8.03 Sockets
- 8.04 Socket Programming
- 8.05 Working with Python Networking
- 8.06 Data Models
- 8.07 Building Client-Server Communication
- 8.08 Socket Types
- 8.09 TCP Sockets
- 8.10 The Tornado Framework
- 8.11 Building a Python Chat Server
- 8.12 Summary

Industry Project

Project 1

Python Decorators

Implement a Python decorator that should take whatever the decorated function returns, and writes it to a file in a new line.

Project 2

Manage the Password

Develop a new version of a password manager that can keep track of all the passwords that have been set for the respective accounts.

Project 3

Patient Management Application

Write an application in Django for a hospital receptionist that has features, including checking if the patient is already registered. If not register the patient.

About Edu Eyrie India

Mission:

Edu Eyrie India is driven by a mission to provide quality education and skill development to empower individuals for success in their professional journeys.

Expert Faculty:

Our institution boasts a team of expert instructors who bring industry experience and knowledge to the forefront of our educational programs.

Holistic Learning:

We believe in providing a holistic learning experience, combining technical expertise with soft skill development for well-rounded professionals.

Cutting-edge Curriculum:

Our courses feature cutting-edge curriculum, keeping pace with industry trends and technological advancements.

Innovative Teaching Methods:

Edu Eyrie India employs innovative teaching methods, incorporating practical exercises, projects, and real-world applications to enhance learning outcomes.

