



Learn Well Technocraft

PYTHON SCRIPTING



SYLLABUS

8th year of Accomplishments

AUTHORIZED GLOBAL CERTIFICATION
CENTER FOR MICROSOFT, ORACLE, IBM,
AWS AND MANY MORE.

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ACHIEVEMENTS FROM TRAINING



- CANDIDATE WILL BE ABLE TO SHOW 2-3 YEARS EXPERIENCE AFTER TRAINING.
- REAL TIME SCENARIOS, CASE STUDIES, PROJECTS INCLUDED.
- REAL TIME DATA PROVIDED FOR PRACTICE.
- SOFTWARE WILL BE INSTALLED ON CANDIDATES MACHINE.
- INDIVIDUAL 1 ON 1 DISCUSSIONS FOR RESUME MODIFICATIONS.
- LEARN FROM INDUSTRY EXPERTS.
- GLOBAL CERTIFICATION PREPARATION.
- APPEAR FOR GLOBAL CERTIFICATION AT LEARN WELL TECHNOCRAFT ITSELF.
- GET DISCOUNTED CERTIFICATION VOUCHERS.
- AUTHORIZED GLOBAL CERTIFICATION CENTER FOR PEARSON, PSI, KRYTERION.

RECOMMENDED

Courses best Suited With with
Python

- IOT
- DATA ANALYTICS
- MACHINE LEARNING
- ARTIFICIAL INTELLIGENCE (AI)
- AUTOMATION TESTING
- ROBOTICS
- DEVOPS



Module 1: Basic Concepts

What is Python?

Your First Program

Simple Operations

Floats

Other Numerical Operations

Strings

Simple Input & Output

String Operations

Type Conversion

Variables

In-Place Operators

Using an Editor

Module 1 Quiz/Assignment

Module 2: Control Structures

- Booleans & Comparisons
- If - Else statements
- Boolean logic
- Operator precedence
- While loop
- Lists
- List Operations
- List Functions
- Range Function
- For loop
- A Simple Example
- Module 2 Quiz/Assignment

Module 3: Functions & Modules

- Code Reuse
- Functions
- Function arguments
- Returning from Functions
- Comments and Docstrings
- Functions as objects
- Modules
- The Standard Library & pip
- Module 3 Quiz/Assignment

Module 4: Exceptions & Files

Exceptions

Exception Handling

Finally

Raising Exceptions

Assertions

Opening Files

Reading Files

Writing Files

Working with Files

Module 4 Quiz/Assignment

Module 5: More types

None

Dictionaries

Dictionary Functions

Tuples

List Slices

List Comprehension

Dictionary Comprehension

String Formatting

Useful Functions

Text Analyzer

Module 5 Quiz/Assignment

Module 6: Functional Programming

Introduction

Lambdas

Map & Filter

Generators

Decorators

Recursion

Sets

Itertools

Module 6 Quiz/Assignment

Module 7: Object Oriented Programming

Classes

Inheritance

Magic Methods & Operator Overloading

Object Lifecycle

Data Hiding

Class & Static Methods

Properties

Abstract Base Class

MetaClass

Type Class

Singleton Design Pattern

Factory Design Pattern

A Simple Game

Module 7 Quiz/Assignment

Module 8: Regular Expressions

Introduction

Simple Metacharacters

Character Classes

More Metacharacters

Groups

Special Sequences

Email Extraction

Module 8 Quiz/Assignment

Module 9: Python & Packaging

The zen of Python

PEP2

More on functions arguments

Tuple Unpacking

Ternary Operator

More on Else Statements

`__main__`

Major 3rd party libraries

Packages

Packaging for users

Module 9 Quiz/Assignment

Module 10: Multithreading, Database & Debugging

- Python Threading module
- Python Queue
- Python + MySQL
- Python debugging using pdb
- Module 10 Quiz/Assignment

Module 11: Database concepts

- Database operation using SQLite
- Create Database Connection
- CREATE, INSERT, READ, UPDATE and DELETE Operation
- Performing Transactions
- Handling Database Errors
- Disconnecting Database

Module 12: (Optional)

- Django framework understanding
- PyQt Framework
- Demo project
- Creation of view
- Creation of template
- Connect with database
- Introduction to Numpy
- Introduction to Pandas
- Introduction to Matplotlib
- Python with Analytics Case Study

Note: We will have practical sessions for all the topics mentioned above

Also Available

- Internships - Paid / Free
- Internship certifications on successful completion
- Final year Collage Projects on Latest Skills
- Special Project batches
- Collage Seminars