



+91 90341 20220

services@digitalmatty.com

www.digitalmatty.com

Digital Matty Pvt Ltd, Ground floor,
Hotel Gopiraj Complex, Surkhab
Chowk, Sirsa, Haryana (125055)

▶ Python (6 Weeks Industrial Training) Course Structure

Week 1: Overview of Python

- History, features, and applications of Python
- Setting up the Python environment: installation, IDEs, and basic configuration

Python Basics

- Syntax, variables, data types, and basic operations
- Basic input and output operations

Hands-on Project

- Building a simple console-based calculator

Week 2: Basics of HTML and CSS

Basic HTML

- Overview of HTML: structure, elements, and tags
- Creating a simple HTML document
- Headings, paragraphs, lists, links, and images

HTML Forms and Tables

- Creating forms: input types, labels, and buttons
- Building tables: rows, columns, and headers

Basic CSS

- Overview of CSS: syntax, selectors, and properties
- Styling text, colors, and backgrounds
- Box model, margins, padding, and borders

Week 3: Control Flow and Functions

Conditional Statements

- If, elif, else statements

Loops

- For loops, while loops, loop control statements (break, continue, pass)

Functions

- Defining functions, arguments, return values, and recursion
- Hands-on project: Creating a program to manage a list of contact

Lists, Tuples, Sets, and Dictionaries

- Operations and methods for each data structure

Advanced Data Structures

- List comprehensions and generator expressions

Working with Files

- Reading and writing text and CSV files
- Hands-on project: Developing a simple inventory management system

Week 4: Object-Oriented Programming (OOP) in Python and MySQL

- Classes, objects, attributes, and methods
- Inheritance and polymorphism

Advanced OOP Concepts

- Encapsulation and abstraction

MySQL Integration

- Introduction to databases and SQL
- Installing and setting up MySQL
- Connecting to MySQL using Python (using MySQL Connector/PyMySQL)
- Performing CRUD operations (Create, Read, Update, Delete)
- Hands-on project: Building a basic banking system using OOP and MySQL

Week 5: Modules, Packages, and Libraries

Creating and Using Modules and Packages

- Importing and organizing code using modules and packages

Day 3-4: Exploring Python's Standard Libraries

- Overview of libraries like `ios`, `sys`, `datetime`, `math`, etc.

Introduction to Third-Party Libraries

- Installing and using libraries (`pip`, virtual environments)
- Hands-on project: Developing a basic web scraper using `requests` and `Beautiful Soup`

Week 6: Advanced Python Concepts and Final Project Development

Error Handling

- Exceptions and `try-except` blocks

Advanced Topics

- Decorators and context managers

Working with Databases

- Using `SQLite` and `SQLAlchemy`

Final project: Implementing a comprehensive application integrating concepts learned throughout the course

Digital **Matty**
Pvt Ltd