



Complete Practical, Real-time Job Oriented Training

Python Full Stack Developer

What is Python?

Python is a versatile and easy-to-learn programming language used across various domains like web development, data science, automation, and artificial intelligence.

Known for its clean and readable syntax, Python helps developers write code faster. It supports multiple programming styles, including object-oriented and functional programming.

Its flexibility and community support make it a top choice for both beginners and professionals.

What are the job roles in Python?

1. Python Developer
2. Data Analyst
3. Data Scientist
4. Machine Learning Engineer
5. DevOps Engineer
6. Data Engineer
7. Software Engineer

What does this Python Course include?

This 100% Practical course includes:

- Module 1: CORE PYTHON
- Module 2: ADVANCED PYTHON
- Module 3: SQL CONCEPTS
- Module 4: FLASK & DJANGO
- Module 5: UI / UX TECHNOLOGIES

Total Duration: 4+ Months

Who can join this course?

Anyone. We learn from Basics and proceed to Advanced concepts, scenarios and more with Realtime Project.

The advertisement for the Python Full Stack course features the SQL SCHOOL logo and an ISO 9001 certification seal. The main title is 'Python Full Stack' in large yellow letters, followed by 'New Batch Every 10 days'. A list of course topics includes Core Python, Advance Python, SQL Basics, HTML, CSS, JS, and Flask & Django. A checklist on the right highlights 'Step by Step', 'Online Training', 'Offline Training', and 'Real-Time Project'. A man in a suit is shown pointing upwards. At the bottom, there are icons for various technologies (JS, MySQL, A, B, Python, Django) and contact information: a phone icon, the number '+91 9666 64 0801', and the website 'www.sqlschool.com'.

DETAILED COURSE CURRICULLUM

Module 1: Python Concepts & Analytics

Ch 1: Python Introduction

- ✓ Python Introduction
- ✓ Python Versions
- ✓ Python Job Roles

Ch 2: Python Architecture

- ✓ Python Architecture
- ✓ PVM: Python Virtual Machine
- ✓ Compiler
- ✓ Byte Code
- ✓ Execution Process
- ✓ Resource Allocations
- ✓ Python Implementations

Ch 3: Python Installations

- ✓ Python Introduction
- ✓ Python Installations
- ✓ Anaconda Installation
- ✓ Python IDE & Usage
- ✓ Jupyter Notebooks

Ch 4: Python Print Statement

- ✓ Python Print Statement
- ✓ print(), print()
- ✓ Testing Case Sensitivity
- ✓ Single Line print()
- ✓ Multi Line print()
- ✓ print() with single quotations
- ✓ Debug with AI (AI Assistants)

Ch 5: Python Variables

- ✓ Python Variables
- ✓ Assigning values
- ✓ Purpose & Rules
- ✓ Variable Value Reads
- ✓ Multiple Variables & Print()

Ch 6: Python Operators

- ✓ Arithmetic *& Multiplier Operators
- ✓ Python String Literals
- ✓ Single, Double Quotes
- ✓ Format Strings (f string)
- ✓ Comparison, Indexing Operators

Ch 7: Python Data Types

- ✓ Python Data Types
- ✓ Integer, Float, String Data Types
- ✓ Type Casting
- ✓ Type Identification
- ✓ Multi Value Assignments
- ✓ Python Built-In Classes (data types)

Ch 7: Python Lists

- ✓ Creating Python Lists
- ✓ Printing List Items
- ✓ Print List Slices
- ✓ Length & Type
- ✓ list() method
- ✓ Empty Lists, Append
- ✓ Loops, List Updates

Ch 8: Python Dictionaries

- ✓ Python Dictionary
- ✓ Creating, Indexing Dictionaries
- ✓ Edit / Overwrite Key Values
- ✓ Lists inside Dictionaries
- ✓ Delete & Clear

Ch 9: Python Tuples

- ✓ Python Tuples
- ✓ Defining, Indexing
- ✓ Length(), Type()
- ✓ Mixed Values in Tuples
- ✓ Overwriting Tuples
- ✓ Tuple Class, (())

Ch 10: Python IF..ELSE Condition

- ✓ If..Else conditions
- ✓ if..elif..else & Shorthand if
- ✓ composite conditions
- ✓ Indent, pass statement
- ✓ in & negation operators
- ✓ range conditions

Ch 11: Python Loops (For)

- ✓ Python For Loop
- ✓ For Loop @ Range
- ✓ For Loop @ Sequence Values
- ✓ Nested Loops
- ✓ Loop Control Statements
- ✓ Break, Continue, Paas

Ch 12: Python Loops (While)

- ✓ While Loop
- ✓ Termination Checks (Expressions)
- ✓ Variables, Logical Conditions
- ✓ Loop Conditions, Operators
- ✓ Exit Conditions
- ✓ iter() and Looping Options

Ch 13: Python Dataframes

- ✓ Dataframes: Creation
- ✓ Pandas Dataframes
- ✓ Dataframes From Single List
- ✓ Dataframes from Dictionary
- ✓ Display Dataframes, List Items
- ✓ Identify, Replace Nulls, NumPy

Ch 14: Python SQL DB Access

- ✓ SQL DB Access with Python
- ✓ import pandas.DataFrame
- ✓ pyodbc module, sql functions
- ✓ SQL DB Cursor Connections
- ✓ SQL Query Executions: DDL, DML
- ✓ Filters, Aggregations with SQL
- ✓ Dataframe Usage with SQL

Ch 15: Dataframe Transformations - 1

- ✓ Dataframe Transformations
- ✓ Concat & Append
- ✓ Merge Function
- ✓ Join with Multiple Dataframes
- ✓ Indexing Operations
- ✓ Data Type Checks, Conversions
- ✓ Loops with Dataframes

Ch 16: Dataframe Transformations - 2

- ✓ Pandas - Cleaning Data
- ✓ Replace, Transform Columns
- ✓ Data Discovery & Column Fill
- ✓ Identify & Remove Duplicates
- ✓ dropna(), fillna() Functions
- ✓ Data Plotting & matplotlib

Ch 17: Python Functions & Lambda

- ✓ Python Functions & Usage
- ✓ Function Parameters
- ✓ Default & List Parameters
- ✓ Python Lambda Functions
- ✓ Recursive Functions, Usage
- ✓ Return & Print @ Lambda

Ch 18: Python File Handling

- ✓ File Handling, Activities
- ✓ Loop, Write, Close Files
- ✓ Appending, Overwriting
- ✓ import os, path.exists
- ✓ f.open, f.write
- ✓ f.read, f.close

Realtime Case Study (Banking / Finance) For Data Analysis

Module 2: Python Programming

Ch 19: Python Modules

- ✓ Import Python Modules
- ✓ Built In Modules & dir
- ✓ datetime module in Python
- ✓ Date Objects Creation
- ✓ strftime Method & Usage
- ✓ imports & datetime.now()

Ch 20: Python User Inputs & TRY

- ✓ Try Except, Exception Handling
- ✓ Raise an exception method
- ✓ TypeError, Scripting in Python
- ✓ Python User Inputs
- ✓ Python Index Numbers
- ✓ input() & raw_input()

Ch 21: Python Dictionary

- ✓ Dictionary Creation, Use
- ✓ Hashing, Copy, Update
- ✓ Deletion, Sorting
- ✓ Len(), Inbuilt Functions
- ✓ Variable Types - python List
- ✓ Cmp() List Method
- ✓ Python Dictionary Str(dict)
- ✓ Programming Concepts
- ✓ Loops and Sets
- ✓ Realtime Usage

Ch 22: Python Packages

- ✓ Package in Python
- ✓ Creating a package
- ✓ Package Imports, Modules
- ✓ Sub Packages Creation
- ✓ Sub Package Imports
- ✓ Popular Packages in Python
- ✓ NumPy & SciPy
- ✓ Libraries in Python
- ✓ Python Seaborn

- ✓ Python framework

Ch 23: Exception Handling

- ✓ Shell Script Commands
- ✓ OS operations in Python
- ✓ File System Shell Methods
- ✓ os - math - cmd - csv - random
- ✓ Numpy (numerical python)
- ✓ Pandas - sys - Matplotlib
- ✓ Common RunTime Errors
- ✓ Python Custom Exception
- ✓ Exception Handling
- ✓ Try...Except...else, Try...finally

Ch 24: Python Class & Objects

- ✓ Class variables, Instances
- ✓ Built in Class Attributes
- ✓ Objects - Constructors
- ✓ Modifiers - Self Variable
- ✓ Python Garbage Collections
- ✓ Hierarchical Inheritance
- ✓ Multilevel, Multiple, Hybrid
- ✓ Overloading & OverRiding
- ✓ Polymorphism– Abstraction

Ch 25: Regular Expressions

- ✓ Regular Expression
- ✓ Regular Expression Patterns
- ✓ Literals - Repetition Cases
- ✓ Groups and Grouping
- ✓ w+ and ^ , \s Expressions
- ✓ re.split function
- ✓ Regular expression methods
- ✓ re.match() in Regular Expr
- ✓ re.search(), re.findall for Text

Ch 26: Multi-Threading

- ✓ Python Multi-Threading
- ✓ Thread Synchronization
- ✓ Python Gil & Programming
- ✓ Thread Control Block (TCB)
- ✓ Stack Pointers & App Usage
- ✓ Program Counters in Realtime
- ✓ Thread State Concept
- ✓ Python Exception Handling

Ch 27: Python TKinter

- ✓ Tkinter GUI Program
- ✓ Components & Events
- ✓ Adding Controls in Tkinter

- ✓ Radio & Check Buttons
- ✓ Tkinter Forms in Realtime
- ✓ List Boxes, Menu, ComboBox
- ✓ Mainloop () & Functions

Ch 28: Python Web & IoT Intro

- ✓ Python Web Frameworks
- ✓ Django: Advantages
- ✓ Web Framework
- ✓ MVC and MVT - Django
- ✓ Web Pages using python
- ✓ HTML5, CSS3 usage
- ✓ PYTHON Bottle & Pyramid
- ✓ Falcon; smart_open in python

Realtime Project on Banking / Finance

Module 3: DATABASE & SQL CONCEPTS

Ch 29: Introduction

- ✓ Database Introduction
- ✓ Types of Databases
- ✓ Need for & ETL, DWH
- ✓ BI Implementations
- ✓ SQL Server Advantages
- ✓ Version, Editions of MSSQL
- ✓ MSSQL Job Role

Ch 30: Installations

- ✓ SQL Server Installation
- ✓ SSMS Tools Installation
- ✓ Database Engine (OLTP)
- ✓ SCM, Configuration Tools
- ✓ Instance Types, Uses
- ✓ Authentication Modes
- ✓ Collation, File Stream

Ch 31: SQL Basics – 1

- ✓ Need for Databases, Tables
- ✓ Need for SQL Commands
- ✓ DDL, DML & DQL Statements
- ✓ Database Creation @ GUI
- ✓ Data Operations @ GUI
- ✓ Session ID, SQL Context
- ✓ DB, Tables, Data @ SQL

Ch 32: SQL Basics – 2

- ✓ DDL Variants in MSSQL
- ✓ DML Variants in MSSQL

- ✓ INSERT & INSERT INTO
- ✓ SELECT & SELECT INTO
- ✓ Basic Operators in SQL
- ✓ Special Operators in MSSQL
- ✓ ALTER, ADD, TRUNCATE, DROP

Ch 33: Data Imports, Schemas

- ✓ Data Imports with Excel
- ✓ ORDER BY & UNION
- ✓ UNION ALL For Sorting Data
- ✓ Creating, Using Schemas
- ✓ Real-world Banking Database
- ✓ Table Migrations @ Schemas
- ✓ 2 Part, 3 Part & 4 Part Naming

Ch 34: Constraints, Index Basics

- ✓ Need for Constraints, Keys
- ✓ NULL, NOT NULL, UNIQUE
- ✓ Primary Key & Foreign Key
- ✓ RDBMS and ER Models
- ✓ Identity Property, Default
- ✓ Clustered Index, Primary Key
- ✓ Non-Clustered Index, Unique

Ch 35: Joins & Views Basics

- ✓ JOINS: Purpose. Inner Joins
- ✓ Left / Right / Full Outer Joins
- ✓ Cross Joins, Query Tuning
- ✓ Creating & Using Views
- ✓ DML, SELECT with Views
- ✓ RLS: WITH CHECK OPTION
- ✓ System Views & Metadata

Ch 36: Grouping & Cube

- ✓ Group By & HAVING
- ✓ Cube, Rollup & Grouping
- ✓ Joins with Group By
- ✓ 3 Table, 4 Table Joins
- ✓ Query Execution Order

Module 4: FLASK & DJANGO

Ch 37: Introduction

- ✓ Introduction to flask and its architecture
- ✓ Installing flask package
- ✓ Introduction to flask components
- ✓ Introduction to Virtual Environment
- ✓ Creating Virtual Environment and activating, deactivating it
- ✓ Introduction to routing in Flask

- ✓ Building sample flask application

Ch 38: Building routes with Flask

- ✓ What is a dynamic route?
- ✓ Building dynamic routes with flask
- ✓ Redirection in Flask
- ✓ Dynamic URL building with url_for function
- ✓ URL converters in Flask
- ✓ int and string url converters
- ✓ request and response in Flask

Ch 39: Introduction to Django

- ✓ Understanding web development frameworks
- ✓ Introduction to Django and its features
- ✓ Installing Django and setting up a development environment
- ✓ Creating a simple Django project and app

Ch 40: Django Models and Database Integration

- ✓ Creating models and defining database tables
- ✓ Working with Django's Object-Relational Mapping (ORM)
- ✓ Performing database queries using Django's QuerySet API
- ✓ Migrations and database schema evolution

Ch 41: Views and Templates

- ✓ Building views to handle HTTP requests
- ✓ Creating templates for dynamic HTML generation
- ✓ Routing and URL patterns in Django
- ✓ Passing data from views to templates

Ch 42: Django Forms

- ✓ Creating HTML forms in Django
- ✓ Form validation and handling form submissions
- ✓ Customizing form behavior with Django form classes
- ✓ Integrating forms with models

Ch 43: Django Admin Panel

- ✓ Utilizing the Django admin interface for content management
- ✓ Customizing the admin panel for specific models
- ✓ Adding custom actions and filters

Ch 44: Authentication and Authorization

- ✓ Implementing user authentication in Django
- ✓ Managing user sessions and passwords
- ✓ Configuring permissions and authorization

Ch 45: Django REST Framework

- ✓ Introduction to RESTful APIs
- ✓ Building APIs with Django REST Framework
- ✓ Serializers, views, and authentication for APIs
- ✓ Consuming APIs in Django applications

Ch 46: Frontend Integration with Django

- ✓ Integrating frontend frameworks with Django
- ✓ Using static files and media in Django projects
- ✓ AJAX and asynchronous behavior in Django applications

Ch 47: Testing and Debugging in Django

- ✓ Writing unit tests for Django applications
- ✓ Debugging techniques and tools
- ✓ Best practices for testing in Django

Ch 48: Deployment and Scaling

- ✓ Preparing a Django application for deployment
- ✓ Choosing a hosting platform
- ✓ Configuring production settings
- ✓ Scaling Django applications

Module 5: UI/UX TECHNOLOGIES

Ch 49: Introduction to frontend technologies

- ✓ Introduction to HTML, CSS and Java Script
- ✓ Hierarchy of HTML
- ✓ Basic HTML programs

Ch 50: Bootstrap

- ✓ Introduction to bootstrap
- ✓ Understanding its working
- ✓ Building basic functions

Ch 51: Java Script

- ✓ Introduction to Java Script
- ✓ Basic functions
- ✓ Script Validations

Ch 52: Attaching External Script File

- ✓ Introduction
- ✓ Integrating Java Script to Python Environment.

Ch 53: DevOps Practices

- ✓ Introduction
- ✓ Waterfall Model Vs Agile Model
- ✓ Basic definitions
- ✓ Working
- ✓ Introduction to containers and container orchestration

Ch 54: End to End Real time Project

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Learn Today, Lead Tomorrow

Courses Offered

1. SQL Server
2. Azure
3. Fabric
4. Power BI
5. AWS
6. Postgres
7. Java
8. Data Science
9. Python
10. Oracle
11. Snowflake
12. AI, CoPilot
13. AI-ML
14. Gen AI, more..

Trending Jobs

- ← Data Analyst
- ← Business Analyst
- ← Data Engineer
- ← SQL Developer
- ← SQL DBA
- ← ETL Admin
- ← Data Scientist








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All sessions are practical, step by step. Kindly ensure on-time practice for best results.