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Industrial Certified

Python Data Science Developer

**All India Council For Technical Skill
Development (AICTSD)**

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PROMISE

**We Guarantee You that, You Can Develop Your Projects by
Your Own After This Training Program**



Python Data Science

Module 1 - Introduction

- Introduction to Python Language
- Industrial Importance of Python Language
- Features of Python Language

Module 2 - Environment Setup

- Getting Started with Python
- Installing Python



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- Unix and Linux Installation in Python
- Windows Installation
- Setting up PATH
- Setting path at Unix / Linux
- Setting path at Windows

Module 3 - Starting With Python Programs

- Script Programming
- Python Identifiers
- Python Keywords
- Python Lines and Indentation
- Python Multi-Line Statements
- Quotation in Python
- Comments in Python
- Using Blank Lines
- Multiple Statements on a Single Line
- Variables and Data Types in Python
- Multiple Assignment in Python Programming
- Standard Data Types in Python



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- Data Type Conversion in Python
- Python Input and Output

Module 4 - Python Operators

- Types of Different Operators in Python
- Changing the Order of Evaluation

Module 5 - Conditional statements in Python Programming

- if statements
- if...else statements
- The elif Statement
- Nested if statements

Module 6 - LOOPS in Python Programming

- While loop
- The Infinite Loop
- Using else Statement with Loops
- For loop
- Nested loops
- Loop Control Statements



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Module 7 - Strings in Python Programming

- Accessing Values in Strings
- Updating Strings
- Escape Characters
- String Special Operators
- String Formatting Operator
- Triple Quotes

Module 8 - Lists in Python Programming

- Python Lists
- Accessing Values in Lists
- Updating Lists
- Delete List Elements
- Basic List Operations
- Indexing, Slicing, and Matrixes
- Built-in List Functions & Methods



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Module 9 - Tuples in Python Programming

- Python Tuples
- Accessing Values in Tuples
- Updating Tuples
- Delete Tuple Elements
- Basic Tuples Operations
- Indexing, Slicing, and Matrixes
- No Enclosing Delimiters
- Built-in Tuple Functions

Module 10 - Dictionary in Python Programming

- Python Dictionary
- Accessing Values in Dictionary
- Updating Dictionary
- Delete Dictionary Elements
- Properties of Dictionary Keys
- Built-in Dictionary Functions & Methods



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Module 11 - Functions in Python Programming

- Calling a Function
- Pass by reference Vs. value
- Function Arguments
- Required arguments
- Keyword arguments
- Default arguments
- Variable-length arguments
- The Anonymous Functions
- The return Statement
- Scope of Variables
- Global vs. Local variables
- The global statement

Module 12 - Modules in Python Programming

- The import Statement
- The from...import Statement
- The from...import * Statement
- Locating Modules



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- The PYTHON PATH Variable
- The time Module
- Getting current time
- Getting formatted time & The calendar Module

Module 13 - Advance Data Types, Functions, Modules

- Working with lists, dictionary and tuples
- Defining functions
- Working with modules

Module 14 - File I/O Operations

- Reading and writing files
- Access modes of files

Module 15 - Exception Handling

- Handling a exception
- Multiple exceptions
- User-defined exceptions



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Module 16 - OOPs with Python

- Overview of OOP terminology
- Defining Classes and Objects
- Working with Inheritance
- Abstract Classes

Module 17 - GUI

- Working with Tkinter module
- Creating graphical Windows, Frame
- Creating Text box, Label, Check buttons ,Radian buttons etc