



**Embedded Technosolutions**

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**Industrial Certified  
School Programmer**

**All India Council For Technical Skill  
Development (AICTSD)  
In Association with  
IITians Embedded Technosolution**





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**PROMISE**

**We Guarantee You that, You Can Develop Your Projects by  
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## Chapter 1: Introduction

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

## Chapter 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

### **Chapter 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

### **Chapter 4 : Python - Operators**

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

### **Chapter 5 : Conditional statements in Python Programming**

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

### **Chapter 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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## Chapter 7: Strings in Python Programming

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

## Chapter 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

## Chapter 9 : Tuples in Python Programming

- Python Tuples



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

### **Chapter 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

### **Chapter 11 : Functions in Python Programming**

- Calling a Function
- Pass by reference Vs. value
- Function Arguments



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- 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

### **Chapter 12: Modules in Python Programming**

- The import Statement
- The from...import Statement
- The from...import \* Statement
- Locating Modules
- The PYTHON PATH Variable
- The time Module
- Getting current time
- Getting formatted time & The calendar Module