



EXCEL
INTERNATIONAL

Course Name: Introduction to Coding for Beginners

1. Course Module Structure

This course is divided into 10 structured modules designed to introduce learners to the fundamentals of coding and programming. Each module builds progressively, helping students develop problem-solving skills, understand programming logic, and create simple programs. The course focuses on hands-on learning, enabling beginners to write, test, and debug code while gaining confidence in working with programming languages and tools.

2. Module, 3. Topic & 4. Module for 10

Module 1: Introduction to Coding

Topics:

- What is coding?
 - Importance of programming in today's world
 - Types of programming languages
 - Basics of how programs work
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Module 2: Understanding Programming Concepts

Topics:

- Algorithms and flowcharts
 - Syntax and semantics
 - Writing simple instructions
 - Introduction to problem-solving
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Module 3: Getting Started with Programming Language (Python)

Topics:

- Introduction to Python
 - Setting up the environment
 - Writing first program
 - Basic input and output
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Module 4: Variables and Data Types**Topics:**

- What are variables?
 - Types of data (integers, strings, floats)
 - Assigning values
 - Type conversion
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Module 5: Operators and Expressions**Topics:**

- Arithmetic operators
 - Comparison operators
 - Logical operators
 - Writing expressions
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Module 6: Conditional Statements**Topics:**

- If, else, and elif statements
 - Decision-making in programs
 - Nested conditions
 - Real-life examples
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Module 7: Loops and Iterations**Topics:**

- For loop and while loop
 - Loop control statements
 - Repetition in coding
 - Practical exercises
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Module 8: Functions and Modular Coding

Topics:

- What are functions?
 - Defining and calling functions
 - Parameters and return values
 - Code reusability
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Module 9: Basic Data Structures

Topics:

- Lists and tuples
 - Dictionaries
 - Accessing and modifying data
 - Simple data handling
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Module 10: Practice and Mini Project

Topics:

- Debugging techniques
- Writing simple programs
- Mini project development
- Final assessment and improvement