

# **IIAIT**

## **COURSE CONTENT**

**Python**

## **1. Introduction to Python Programming**

- What is Python?
- Why Python?
- Python Philosophy And The Zen Of Python
- A Brief History Of Python
- Features of Python
- Installation on Windows Gnu/Linux and Unix Systems

## **2. First Steps**

- Using The Interpreter Prompt
- Choosing An Editor
- Sublime Text
- Vim
- Using A Source File
- Getting Help

## **3. Programming Basics**

- Hello World Program
- Comments
- Literal Constants
- Numbers
- Strings
- The Format Method

## **4. Basics Continued**

- Raw String
- Escape Sequences
- Variables
- Identifier Naming
- Data Types

- Object
- How To Write Python Programs
- Indentation

## 5. Operators and Expressions

- Operators

WAVE

- Evaluation Order
- Changing The Order Of Evaluation
- Associativity
- Expressions

## 6. Control Flow

- The if Statement
- The while Statement
- The for Loop
- The break Statement
- The continue Statement

## 7. Functions

- Function Parameters
- Local Variables
- Using The Global Statement
- Default Argument Values
- Keyword Arguments
- VarArgs Parameters
- Keyword Only Parameters
- The return Statement
- DocStrings

## 8. Modules

- Byte-Compiled .pyc files
- The from ... import Statement
- A module's name
- Making Your Own Modules
- The dir Function
- Package

- The sys

## 9. Data Structures

- List
- Tuple
- Dictionary

WANT

- Sequence
- Set
- References
- More About Strings

## **10. Input Output**

- Input from user
- Files
- Pickle
- Unicode

## **11. Regular Expressions**

- Introduction
- Wild Card Characters
- Searching
- Extracting
- Practice Problems
- Do's and Don'ts
- Summary