

Python is one of the most popular programming languages in the world, Python can be easy to pick up whether you are a first time programmer or you're experienced with other languages. Python is the number one language choice for machine learning, data science and artificial intelligence. Huge companies like Google use it in mission critical applications like Google Search. By the end of the course, you will have the right skills you need to get your first Python programming job, to move to a more senior software developer position, or just to be able to create your own Python apps quickly.

#### You Must Know!

#### **Duration:**

40 Hours

#### Who should attend?

Beginners with no previous programming experience who want to improve their career options by learning the Python programming language

## Main Topics:

- Data types
- o Variable & Strings
- o Loops
- o Tuples & Lists
- o Dictionaries & Sets
- Functions
- Object-oriented Programming
- o GUI Programming

## Course modules

### Module 1 - Introduction to Python and Scripting Concepts

- o Get an overview of Python
- The companies using Python
- Other applications in which Python can be used
- o Explore Python Frameworks and IDEs
- Concept of Scripting
- o Difference between Scripting language and Programming language
- Installation of Python

### Module 2 - Introduction to Data types and Conditional Statements

- Introduction to Identifiers
- o What are the different variable types?
- Different operators
- o Conditional statements
- o Loops

## Module 3 - Deep Dive into Data Types

- Numbers
- Strings and related operations
- o Tuples and related operations
- Lists and related operations
- o Dictionaries and related operations
- Sets and related operations

# Module 4 - Functions, 00P's and Exception Handling

- Function Parameters
- Global variables
- o Why Python is called Object-oriented language?
- Class and Objects
- Variable scope and Returning Values
- o Python files I/O Functions
- Errors and Exception Handling
- Handling multiple exceptions



# Module 5 - Network Programming, Multi-Threading and GUI Programming

- o Modules used in python
- o MySQL DB access
- Network programming
- o GUI programming



המכללה שומרת לעצמה את הזכות לערוך מעת לעת, לפי שיקול דעתה, שינויים בתכנית הלימודים, היקף שעות הלימוד, סגל המדריכים וכד', ולא יראו בכל מידע המפורט בדפי מידע של המכללה כהתחייבות כלשהי מצד המכללה.