



Introduction to Python Programming

Training Programme
by
Faculty of Engineering
Multimedia University

Overview

Python is a high-level dynamically-typed object-oriented programming language. It is used in a wide variety of applications ranging from data science, web development, scientific computation to game programming. Python has topped the list of IEEE Spectrum's Top Programming Languages for three consecutive years due to its vast number of specialized libraries, particularly in the domain of artificial intelligence and data science. This module will introduce the fundamentals of programming in Python through a series of lectures, demonstrations, and hands-on exercises. The participants will learn the essences of Python programming language, including data types, conditional logic, control flow, functions, file input and output, and many more.

Objective

At the end of the session, participants will be able to:

1. Identify core elements and built-ins of Python programming language.
2. Apply Python compound statements and comprehensions in writing well-structured programs.
3. Design and program Python applications for task automation and problem solving.

Target Audience

This course is open to anyone who would like to use Python programming language and its huge collections of well packaged libraries for task automation and problem solving.

Prerequisite

None.

Training Methodology

Virtual presentations, demonstrations and hands-on exercises.

Course Duration

2 days.

Content/Outline

Session 1: Python Programming Fundamentals

- Modern Python development environment
- Core Python elements and built-ins
- Atomic data types
- Container data types

Session 2: Python Compound Statements

- Conditional logic and control flow
- Python comprehensions
- Defining functions
- Object Oriented Programming

Session 3: Programming Python Applications

- Python libraries and extension modules
- Working with file system
- Command line arguments

Course Instructors

Dr. Tan Wooi Haw

Dr. Tan Wooi Haw received his M.Sc. in Electronics from Queen's University of Belfast, UK and a Ph.D. in Engineering from Multimedia University. He is currently a senior lecturer at Multimedia University. Dr. Tan's areas of expertise include image processing, embedded system design, Internet of Things (IoT), machine learning and deep learning. He has been involved in various government and private funded projects since he started his career

with the University. His works have been published in numerous international journals and conferences. Besides, he has also co-authored two textbooks on microcontroller systems.

Dr. Tan has been actively involved in designing and developing hardware prototypes for Internet of Things (IoT) based embedded systems and software systems for machine learning and deep learning. He is also teaching embedded system design, Internet of Things, artificial intelligence and computer networking at both undergraduate and postgraduate levels. As a trainer certified by HRDF, he provides training and workshops for industries especially in the areas of Internet of Things (IoT), machine learning and deep learning. In addition, Dr. Tan is also a regular participant in competitions such as Innovate Malaysia Design Competition, ITEX and PECIPTA, from which he has won several awards.

Administrative Details

Programme Logistics

Duration: 2 days

Date:

Please refer to the updated dates at <https://www.mmu.edu.my/foe/short-courses/>

Registration deadline:

Please refer to the updated dates at <https://www.mmu.edu.my/foe/short-courses/>

Your Investment

Condition		Price per Pax
Regular Fee	Students / MMU Alumni	RM500
	Public	RM800
	Public (Group >5 pax)	RM600
Early Bird Fee	Students / MMU Alumni	RM300
	Public	RM600
	Public (Group >5 pax)	N/A

Method of Payment

Please make payment via bank transfer only. Account details is as below:

Account name: Unitele Multimedia Sdn Bhd

Account number: 86-0090180-2

Bank: CIMB Islamic Bank Berhad

Payment must be made by the registration deadline.

Refund and Cancellation

Any refunds will be processed in 60 days. Should there be any cancellation, it may be due to the organizer not getting the minimum participants or the participant failing to attend the workshop due to unavoidable reason.

Disclaimer

Faculty of Engineering, Multimedia University reserves the right to change the instructors, date and to vary/cancel the programme should unavoidable circumstances arise. All effort will be taken to inform participants of the changes. Upon submission of the registration form, you are deemed to have read and accepted the terms.

Enquiries

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Registration Form

To register, please visit this link: <https://forms.gle/G3kCULmgejXktGgZ>