



# 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

1 days (7 hours).

## 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

### Session 3: Programming Python Applications

- Python libraries and extension modules
- Working with file system
- Using popular Python modules and packages for data analytics, data visualization and building graphical user interface (GUI).

## 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: 1 day (7 hours)

Dates, registration deadline, registration fee and registration form:

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



### Your Investment

	Condition	Price per Pax
Regular Fee	Students / MMU Alumni	RM300
	Public	RM500
	Public (Group >5 pax)	RM400
	IEM/IEEE Members	RM400
Early Bird Fee	Students / MMU Alumni	RM200
	Public	RM400
	Public (Group >5 pax)	N/A
	IEM/IEEE Members	RM300

### Method of Payment

Please refer to the next page.

Type of Payment	Method	Details
Local Transaction / Payment within Malaysia	Online Payment with JomPay	<ul style="list-style-type: none"> <li>To get started, login to any preferred internet banking.</li> <li>Look for JomPay to begin the payment process.</li> <li>Enter Ref 1 &amp; Ref 2.</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">  <b>Billers Code :</b> 22202  <b>Ref-1 :</b> &lt;Participant IC/Passport&gt;  <b>Ref-2 :</b> Event Name*         </div> <p><b>JomPAY</b> online at Internet and Mobile Banking with your Current, Savings or Credit Card account</p> <p>*Ref. 2: FOEPython</p>
		<ul style="list-style-type: none"> <li>To get started, go to <b>MMU website</b> (<a href="https://www.mmu.edu.my/">https://www.mmu.edu.my/</a>) &gt; <b>Admission &gt; Financial Info &gt; Payment Channel &gt; Non Student</b> ;</li> </ul> <div style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p><b>E-Payment</b>              To begin the payment process, please click Student or Non Students</p> <p>  </p> <p><a href="#">Student</a>   <a href="#">Non-Student</a></p> </div> <p>or scan the QR code below to begin the process:</p> <div style="text-align: center; margin: 10px 0;">  <p><b>SCAN ME</b></p> </div> <ul style="list-style-type: none"> <li>Choose Category: <b>Public Training</b></li> <li>Workshop Name</li> <li>Choose Your Participant Type:             <ul style="list-style-type: none"> <li>✓ STUDEN (MMU, IEEE, IEM, Other Higher Learning Institution )</li> <li>✓ PUBLIC</li> <li>✓ GROUP ( Group &gt; 5 Pax )</li> <li>✓ IEEE/M (IEEE/IEM Members)</li> </ul> </li> </ul>

Type of Payment	Method	Details
International Payment / Payment outside Malaysia	Online payment with Flywire  	<ul style="list-style-type: none"> <li>To get started, go to <a href="http://mmulanding.flywire.com">mmulanding.flywire.com</a>; or scan the QR code to begin the payment process:</li> </ul>  <ul style="list-style-type: none"> <li>Choose Conference for Non-students related</li> </ul>

**Note:**

Please submit the proof of payment to organizer for clearance updating purposes within 2 working days.

**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**

Dr. Zubaida Yusoff: [zubaida@mmu.edu.my](mailto:zubaida@mmu.edu.my)

Ms. Sherry Dalilla Abd. Rahim: [dalilla.rahim@mmu.edu.my](mailto:dalilla.rahim@mmu.edu.my)