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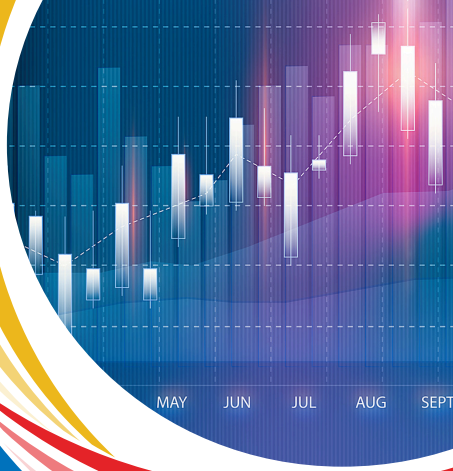

DIGITAL & IT

BASIC

Mastering Data Analysis with Python

SOA: Programming and Coding

Description

This course aims to equip learners with the knowledge and skills to develop python programs. Python is one of the most versatile software programming languages and is widely used in AI and machine learning. Its versatility also extends to business intelligence tools.

This course will help learners learn the syntax and program logic techniques of python and apply it to creating data analysis routines as well as to use python libraries for data visualization in Power BI Desktop and Tableau.

Who is this Course For?

This training is relevant to all workers, PMETs, executives and professionals who are required to perform tasks automation and data analysis to engage with stakeholders and target audience to promote a business case as well as to present Management with business insights to facilitate decision making.

Course Objectives

By the end of this course, learners will be able to:

- Understand the characteristics of the programming language that is suitable for business use.
- Apply best practice to create program designs and code structures and organisation.
- Develop algorithm and data structure in python according to business requirements.
- Apply multiple functions and libraries available in python on business requirements.
- Resolve errors and bugs using problem-solving and error handling techniques in python.
- Address business objectives and processes with python solution.
- Incorporate program enhancements to produce desired outcome.
- Apply code documentation for changes in code to address business changes.

Course Duration
16 Hours

Course Reference No.
TGS-2025059157

Mode of Training
Classroom

Funding Validity
Till 09 Sep 2027

Full Fee $950
(Subject to 9% GST)

Pricing	Funding	Nett Fee (After GST)
SME OR SINGAPOREAN AGE 40 AND ABOVE	70%	$370.50
NON-SME OR SINGAPOREAN AGE 21 TO 39 OR PR	50%	$560.50

Subsidies available: SFC, SFEC, PSEA

As pre-requisites may differ by course, we strongly encourage you to review the details and contact us for any clarification.

Visit our Website

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ver. no.: 2025.09.18

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Course Content

Learning Unit 1: Understand the concept of Software Development

- Understanding software programming
- Introduction to Python

Learning Unit 2: Enhance Programming Design Approach through Design and Scripting Tools like Pseudo-Code and Flowchart

- Creating Program Description and Specification Approach
- Tools to Design Program Scripts

Learning Unit 3: Understanding Different Data Structure Types and Variables in Python

- Create algorithm to perform computations in Python
- Apply Various Data Structure for Variables and Lists

Learning Unit 4: Understand Python Programming Syntax with Functions and Libraries for Data Analysis

- Using Types of Functions and Procedures to Address Business Requirements
- Incorporating Python Libraries for Data Analysis

Learning Unit 5: Create Routines for Problem-Solving and Error Handling with Conditional Statements

- Using Conditional Statements for Problem Solving
- Routines for Error Handling

Learning Unit 6: Create Different Loop Routines with Variables in Python

- Using Different LOOP Statements

Learning Unit 7: Enhance Python Codes to Support Data Visualisation

- Embedding Codes and Libraries to Enhance Data Visuals

Learning Unit 8: Enhance Code Readability for Code Maintenance in Python

- Enhancing Code Maintenance with Good Documentation Practice

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