

[MS55264]: Introduction to Programming Using Python

Length	: 5 Days
Audience(s)	: IT Pros
Level	: Beginner
Technology	: Programming Languages
Delivery Method	: Instructor-led (Classroom)

Course Overview

This five-day instructor-led course is intended for students who want to learn how to write Python code that logically solves a given problem. Candidates will learn how to write, debug, maintain and document Python code. The material will prepare students for the Microsoft certification exam 98-381.

Audience Profile

This course is intended for new and experienced programmers that want to learn how to write and troubleshoot Python code. This is the Microsoft recommended course for preparing for the 98-381 test. Previous programming experience is not required but recommended.

At Course Completion

- Create Operations using Data Types and Operators
- Create Control Flow Operations
- Create Input and Output Operations
- Write and Document code to solve a specified problem
- Troubleshoot Problems and Write Error Handling Operations
- Perform Operations Using Modules and Tools

Pre-Requisites

- Experience performing command-line operations on Windows, Linux or Mac computers
- Six months experience writing code in any programming language (Recommended)

Course Outline

Module 1: Perform Operations Using Data Types and Operators

This module explains how to use Python operators and data types to achieve a specified result.

Lessons

- Assign data types to variables
- Perform data and data type operations
- Perform Arithmetic, Comparison and Logical Operations

AVANTUS TRAINING PTE LTD

80 Jurong East Street 21 #04-04 Devan Nair Institute Singapore 068897

Main Line: +65 6661 0888 | Fax: +65 6661 0886

Email: enquiries@AvantusTraining.com

www.AvantusTraining.com

- Review

Lab: Perform Operations Using Data Types and Operators

- Assign data types to variables
- Perform data and data type operations
- Perform Arithmetic, Comparison and Logical Operations

After completing this module, students will be able to:

- Assign data types to variables
- Manage data and data type operations
- Perform Arithmetic, Comparison and Logical Operations

Module 2: Control Flow with Decisions and Loops

This module explains how to use Control Flow and Looping operations in Python.

Lessons

- Construct and analyze code segments that use branching statements
- Construct and analyze code segments that perform iterations
- Review

Lab: Control Flow with Decisions and Loops

- Using branching operations
- Using iteration operations

After completing this module, students will be able to:

- Create branching operations
- Create iteration operations

Module 3: Perform Input and Output Operations

This module explains how to construct input and output operations using files or from the console.

Lessons

- Create Python code segments that perform file input and output operations
- Create Python code segments that perform console input and output operations
- Review

Lab: Perform Input and Output Operations

- Perform input and output operations using files
- Perform input and output operations from the console

After completing this module, students will be able to:

- Use files for input and output operations
- Use the console to perform input and output operations

AVANTUS TRAINING PTE LTD

80 Jurong East Street 21 #04-04 Devan Nair Institute Singapore 068897

Main Line: +65 6661 0888 | Fax: +65 6661 0886

Email: enquiries@AvantusTraining.com

www.AvantusTraining.com

Module 4: Document and Structure Code

This module explains how to structure and document well-written Python code.

Lessons

- Construct and analyze code segments
- Document code segments using comments and documentation strings
- Review

Lab: Document and Structure Code

- Construct and Analyze Code Segments
- Document Code Segments

After completing this module, students will be able to:

- Construct and Analyze Code Segments
- Document Code Segments

Module 5: Perform Troubleshooting and Error Handling

This module explains how to perform troubleshooting and error handling operations in Python.

Lessons

- Analyze, Detect and Fix code segments that have errors
- Analyze and construct code segments that handle exceptions
- Review

Lab: Perform Troubleshooting and Error Handling

- Analyze, Detect and Fix code segments that have errors
- Analyze and Construct code segments that handle exceptions

After completing this module, students will be able to:

- Detect and Fix errors in code
- Create error handling code

Module 6: Perform Operations Using Modules and Tools

This module explains how to use built-in modules.

Lessons

- Use Built-In Modules to perform basic operations
- Use Built-In Modules to perform complex operations
- Review

Lab: Perform Operations Using Modules and Tools

- Use Built-In Modules to perform basic operations
- Use Built-In Modules to perform complex operations

AVANTUS TRAINING PTE LTD

80 Jurong East Street 21 #04-04 Devan Nair Institute Singapore 068897

Main Line: +65 6661 0888 | Fax: +65 6661 0886

Email: enquiries@AvantusTraining.com

www.AvantusTraining.com

After completing this module, students will be able to:

- Use Built-In modules to perform operating system, date and mathematical operations

Additional Reading

To help you prepare for this class, review the following resources:

- Microsoft test objectives for Exam 98-381

AVANTUS TRAINING PTE LTD

80 Jurong East Street 21 #04-04 Devan Nair Institute Singapore 068897

Main Line: +65 6661 0888 | Fax: +65 6661 0886

Email: enquiries@AvantusTraining.com

www.AvantusTraining.com