

UEN No.: 198802365N



# ICDL - Computing (Coding With Python)

Classroom / Synchronous e-Learning

TGS-2021009974 (Classroom Training)
TGS-2021009973 (Synchronous e-Learning)

# **Course Objectives**

- Understand key concepts relating to computing and the typical activities involved in creating a program
- Understand and use computational thinking techniques like problem decomposition, pattern recognition, abstraction and algorithms to analyse a problem and develop solutions
- Write, test and modify algorithms for a program using flowcharts and pseudocode
- Understand key principles and terms associated with coding and the importance of wellstructured and documented code
- Understand and use programming constructs like variables, data types, and logic in a program
- Improve efficiency and functionality by using iteration, conditional statements, procedures and functions, as well as events and commands in a program
- Test and debug a program and ensure it meets requirements before release

# **Target Audience**

Data scientists, finance/accounting professionals, consultants, project managers, agile and scrum professionals, web developers, administrators and other professions who require some basic knowledge of python.

Course Fee: \$480 + GST \$33.60

**Nett Fee After Funding:** 

**Corporate:** 

SME: \$177.60

Non-SME: \$273.60

Non-SME (MCES): \$177.60

MCES: Singaporean age 40 and above Normal: Singaporean/PR age 21 and above

**Self-sponsored:** 

MCES: \$177.60

Normal: \$273.60

# SkillsFuture Credit eligible

Call us @ 6737 5761 WhatsApp @ 8767 0614 enquiry@eagleinfotech.edu.sg

SME: Singapore registered companies with (i) at least 30% local sharing AND (ii) group annual sales ≤\$100 million OR group employment size ≤200

### **Assumed Skills**

- Learners must possess WPL level 5 and WPN level 5.
- Learners must be able to operate computers at intermediate level

## Course Outline

#### 1. Computing terms & key concepts

Define computing terms, understand the terms program description and specification, recognise typical activities in the creative of a program, understand the difference between a formal language and a natural language

#### 2. Computational thinking methods

Understand and learn the typical methods used in computational thinking, use problem decomposition to break down data, processes, identify patterns in problems and use abstractions in analysis, designing algorithms by recognising symbols, sequence and technique, fix errors in algorithms

#### 3. Building with Code

Use arithmetic operators to perform calculations in a program, use comments in a program, define, initialise and assign value to variables, use various data types in a program, use data input and output from user and screen in a program, use Boolean logic expressions in a program, use loops in a program, use conditional statements in a program, write and name procedures in a program, use event handles in a program, use generic libraries in a program

#### 4. Testing & Debugging

Understand types of errors in a program, run program, identify and fix various types of errors

CDL Computing (Coding with Python)			<b>Duration</b> 2-days (16-hrs) 8.30am to 5.30pm	<b>Course Code</b> TGS-2021009974 (Classroom TGS-2020503030 (SEL)			Funding Till m) / 31-12-2022	
Schedules	Jun 2022	Jul 20	22 Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	
	8 & 9 18 & 25	1 & 4 23 & 3		1 & 2 24 & 1 Oct	1 & 2 25 & 26	21 & 22 12 & 19	30 Nov & 1 Dec 10 & 11	

