An Introduction to Programming using Python

Course Glossary

Throughout the course, you might find some new words, phrases and abbreviations being used – you can always come to this document to look up any unfamiliar terms!

Word	Definition
A*	A path finding algorithm that finds an optimal path from a graph.
Algorithm	a set of step-by-step instructions that solve a particular problem or accomplish a particular task.
Arguments	values that are passed to a function when it is called, which the function can then use in its operations.
Boolean	a data type that can only be either True or False.
CPU	Central Processing Unit: the "brain" of the computer that executes instructions.
Comment	a line of text that is ignored by the computer and is used to explain code to humans.

Conditionals	statements that allow your program to make decisions based on certain conditions.
elif	a keyword used in Python's if-else statements to add additional conditions to check after the initial if statement and before the final else statement.
else	a keyword used in Python's if-else statements to provide a fallback option if none of the if or elif conditions are met.
Function	a named set of instructions that perform a specific task.
GUI	Graphical User Interface
Graph	a mathematical structure consisting of vertices (nodes) connected by edges that represent relationships between them.
Hello World program	a small program in a programming language, usually the first program one creates in a new language as a validation that everything works.
Input function	a built-in Python function that allows a user to provide input to a program.

Logic operators	operators that combine logic propositions (e.g. and, or, not).
Logic proposition	a statement that can be either true or false.
Loop	a way to repeat a set of instructions multiple times or to iterate over sequences (e.g., numbers).
Parameters	variables that are defined in a function's definition and represent the values that will be passed to the function as arguments when it is called.
Path Finding	the process of finding a path between two points in a graph or network.
Data Types	a classification of the type of data that a variable can hold (e.g. integers, strings, booleans).
Print function	a built-in Python function that displays output to the console or terminal.
Program	a set of instructions that tell a computer what to do, typically written in a programming language and executed by a computer or other device.

Programmer	a person who writes code and creates software applications.
Pseudocode	a simplified way of writing out an algorithm or program in plain English-like language.
RAM	Random Access Memory (type of computer memory used as temporary memory to store working data). It is volatile, meaning its contents are lost when the computer is turned off or restarted.
Strings	a sequence of characters (letters, numbers, symbols) that is used to represent text in a program.
Terminal	a text-based interface used to interact with a computer's operating system.
Text Editor	a program used to create and edit text files, often used for writing and editing code. Examples include Visual Studio Code, Vim, and Sublime Text among others.
Variable	a named abstract container that holds a value that can be changed.
Visual Studio Code	a popular text editor for writing/editing code developed and maintained by Microsoft and the open-source community.