



## DIGITAL SOLUTIONS

# PYTHON PROGRAMMING FOR BEGINNERS

Course code: DI-01

Duration: 3 days

**Prerequisite:**

No previous knowledge of programming is needed. For the hands-on exercises you will need a PC.

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## DESCRIPTION

This training includes lectures and a hands-on workshop, where you will learn the basics of Python programming, including key code management techniques. Python is considered one of the easiest programming languages to learn. It is free and used worldwide in education and industry. Python comes with a vast standard library to help you quickly write powerful computer code. Learning to program well is not easy, but you can master the basics in a few days. You will learn to write complete scripts to automate computer tasks, organize your code into modules and manage development with other people.

The course is geared toward use of Python for data science. If you are wrestling with data in Excel and want to improve and automate your workflow, then this course is for you.

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## TOPICS AND OBJECTIVES

- Programming as problem-solving
- Key programming concepts, including variables, loops and decision-making
- Manipulating large structured and unstructured datasets
- Reading and writing data to/from files in different formats
- Understanding program structure using functions and modules
- Introduction to the Pandas package for data wrangling
- Where to find more information and how to understand it
- Using Jupyter Notebooks for interactive programming and visualization
- (Optional) Version control using git

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## TARGET GROUP

People with no programming experience, novice Python programmers or people with experience in other programming languages who want to learn Python.