

At the end of the course, participants will be able to:

- Understand the different types of data structures in Python
- Learn how to use data structures to represent information coherently
- Learn how to write more powerful programmes by iterating through data structures
- Apply the use of data structures to solve problems in a variety of domains

Course objectives

Any programme dealing with data requires a well-organised system for storing and handling the data. Data structures are a key tool for organising data coherently in collections. This course introduces different Python structures and iteration (looping) through these structures.

Participants will gain an appreciation of how data structures are essential tools for fashioning more complex, detailed and powerful computer programmes that capture the features of real-world entities to represent in code, which can then be adapted to the problem at hand – enabling us to solve problems in domains as diverse as finance, robotics, agriculture and medicine.

Course outline

- Data structures in Python: Lists, Tuples,
 Sets and Dictionaries
- Nested Data Structures
- Iteration through Data Structures in loops

