

# COURSE OVERVIEW

**Course Name:**  
(55285) Advanced Python

**COURSE DURATION: 2 Days**

**Gauteng:**

3rd Floor, 34 Whitely Road  
Melrose Arch  
Johannesburg  
2196

**Gauteng:**

192 on Bram  
192 Bram Fischer Drive  
Ferndale, Randburg  
Johannesburg  
2160

**Cape Town:**

3rd Floor, Thomas Pattullo Building  
19 Jan Smuts St  
Cape Town  
8000

**Durban:**

9 Mountview Close  
Broadlands  
Mount Edgecombe  
Durban  
4302

 **087 941 5764**

 **sales@impactful.co.za**

 **impactful.co.za**

## INTRODUCTION

This Advanced Python training course picks up where our Introduction to Python course leaves off. This course is for students who have taken the introductory course and are ready to learn more and for students who have some experience programming with Python and are ready to go to the next level. The course was written using Python 3.8, but is relevant for all students using Python 3.

## DELIVERY METHOD

Our courses have flexible delivery options:

- In-person classroom training at the Impactful training facilities
  - Johannesburg, Durban, Cape Town
- Virtual instructor-led training
- Nationally: on-site at the client

## INTENDED AUDIENCE

This course is for students who have taken the introductory course and are ready to learn more and for students who have some experience programming with Python and are ready to go to the next level. The course was written using Python 3.8, but is relevant for all students using Python 3.

## PREREQUISITES

Experience in the following is required for this Python class:

- Basic Python programming experience. In particular, you should be very comfortable with:
  - Working with strings.
  - Working with lists, tuples and dictionaries.
  - Loops and conditionals.
  - Writing your own functions.
- Experience in the following would be useful for this Python class:
  - Some exposure to HTML, XML, JSON, and SQL.

## COURSE CONTENT

At course completion, students will have the skills and knowledge to:

- Work with Lambda functions.
- Work with advanced list comprehensions.
- Work with the collection's module.
- Use mapping and filtering.
- Sort sequences.
- Unpack sequences in function calls.
- Work with modules and packages.
- Understand regular expressions.
- Use Python's re module.
- Store data in a relational database.
- Store data in a CSV file.
- Work with data from a web page.
- Use HTML, XML, and JSON.
- Access an API.
- Test performance with timers and the timeit module.
- Work with the unittest module.
- Work with classes and objects in Python.
- Work with instance methods, class methods, and static methods.
- Work with properties.
- Work with decorators.
- Work with subclasses and inheritance.