



Vendor-Neutral Global IT Certifications

Star Python

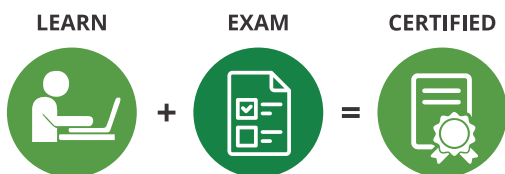
# Get into Python

Learn the Fastest Growing Major Programming Language



**Python**

Exam Code: S07-114



[www.starcertification.org](http://www.starcertification.org)

[info@starcertification.org](mailto:info@starcertification.org)

# Star Python

Python is one of the most popular and widely used programming languages in the world. In fact, Python has surpassed Java to become the first-choice for developers in data science, AI and machine learning market. It is easy-to-use and versatile. Tech giants like Google, Facebook, Netflix use Python to generate insights from data and build ground-breaking products. The Star Python 3 is a comprehensive training program that introduces learners to the Python development language, the essentials of object-oriented programming, and web development. The purpose of this program is to teach the student how to program in Python and prepare for a career in data science, AI, machine learning, and deep learning.

Star Python 3 starts from the basics and gives a holistic view of the Python programming language, detailing all the aspects of Python from data types, to statements, loops, arrays, strings and functions, further to classes, objects and other important OOP concepts like inheritance, polymorphism and more. Advanced concepts like connecting to databases, interacting with networks and handling concurrency are also discussed to give the learners a with holistic view of the Python development capabilities.

**Audience:** This course assumes that the reader is either a new learner in programming, or someone who knows other programming languages but wants to get introduced to Python programming. No prior programming experience required

## Course Objectives:

In this course, you will learn about:

- Programming in Python
- Implementing data types, statement, operators and strings
- Implementing OOPs concept in Python
- Creating GUI applications using Python
- Connecting with databases
- Implementing TCP socket connectivity

## Course Outcome :

After completing this course, you will be able to:

- Create your first program in Python IDLE
- Implement OOPs concepts in your programming
- Use Arrays, and Data structures
- Create an application with the support of graphics in Python
- Implement error handling

## Course Outline :

1. Python: An Introduction
2. Creating Your First Program in Python
3. Data Types: Classifying Data in Python
4. Implementing Input and Output Operations
5. Operators: Performing Logical and Mathematical Operations
6. Statements: Controlling the Flow of Program
7. Strings: A Sequence of Characters
8. Arrays: Arranging Similar Objects Systematically
9. Implementing Functions in Python
10. Lists and Tuples: Managing Data Systematically
11. Dictionaries and Other Data Structures
12. Recursion and Algorithms in Python
13. Implementing OOPs Concepts, Classes and Objects
14. Implementing Inheritance in Python
15. Implementing Polymorphism in Python
16. Interfaces and Abstraction in Python
17. Creating a GUI Using Python
18. Handling Files I/O
19. Connecting to a Database in Python
20. Handling Errors and Exceptions
21. Regular Expressions
22. Interacting with Networks
23. Handling Concurrency Using Threads
24. Handling Numbers, Dates and Time
25. Implementing Expressions, Variables, Quotes, Basic Math operations, Strings: Basic String Operations & String Methods, List, Tuples, Dictionaries, Arrays.
26. Implementing Statements and Functions
27. Implementing OOPS concepts
28. Implementing Exception Handling and Multithreading
29. Implementing GUI Programming using Tkinter
30. Connecting to MySQL Database
31. Implementing connections with TCP and UDP Sockets in Python

## Exam Information:

|               |           |               |  |
|---------------|-----------|---------------|--|
| Exam Code     | : S07-114 | Exam Pattern  | : Multiple Choice  |
| Exam Duration | : 2 Hrs   | Exam Delivery | : AEPTC (ACADEMIC EDUCATION & PROFESSIONAL TESTING CENTER) |
| Passing Score | : 70%     |               |  |

**Course Duration :** 40 Hrs

