

## Program Overview

### (Python Programming for Data Science)

- 1. About the course:** - This course provides a good understanding of Python, the most popular programming languages in the world. It covers data structures, data processing, data visualization, predictive modelling with complete hands-on activities and creating projects. It equips learners to apply Python for data science as well as programming in general. By doing this course students will be able to develop relevant programming abilities in field of data science, demonstrate proficiency with statistical analysis of data, develop the ability to build and assess data-based models and demonstrate skill in data management.
- 2. Course Objective:** -
  - a. To develop relevant programming abilities in field of data science.
  - b. To demonstrate proficiency with statistical analysis of data.
  - c. To develop the ability to build and assess data-based models.
  - d. To demonstrate skills in data management.
- 3. Learning outcomes:** -
  - A. Install and run the Python interpreter
  - B. Create and execute Python programs
  - C. Understand the concepts of file I/O
  - D. Be able to read data from a text file using Python
  - E. Build Real application with Python
- 4. Medium of Instruction or recording:** - Hindi and English
- 5. Minimum Eligibility:** - 12<sup>th</sup> pass or its equivalent from a recognized Board or University.
- 6. Pre-requisite:** - No prior knowledge of Programming language/Computer exposure is required.
- 7. Maximum Duration:** - 60 days
- 8. Hardware Requirement (Minimum Specification):** -
  - a. Processor: Intel i3 7<sup>th</sup> Generations or Higher
  - b. RAM: 4GB
  - c. Graphic Card: Not Required
  - d. Storage: 256 GB
- 9. Software Requirement:** -
  - a. Anaconda
  - b. OS: Windows\* Linux\* macOS\*
- 10. Course Break-up:** - This course is delivered as a blended program. It means it includes Recorded sessions and Live Sessions as well. The duration of each topic (Live or Recorded) varies, depending of the nature and need of the topic.

Course Break-up			
S. NO.	Mode of Delivery	No. of Sessions	Total Duration
1.	Recorded Session	12	590 Mins.
2.	Live Session	6	720 Mins.
3.	Practice with Jupyter Notebook	5	510 Mins.
4.	Assessment (Quiz)	7	140 Mins. (Ideal time)
5.	Total	30	32 Hrs. 40 Mins.

Note:- The link for live sessions will be shared through email 24 hours in advance.

- 11. Qualifying Marks:** - To get the certificate of completion, a student needs to obtain minimum 40 % aggregate marks.
- 12. Assessment:** - Assessment of each student will be done on the basis of their score in Quizzes, assignment submitted (through Jupyter Notebook), presence and interaction in live classes and finally completion of the course within the stipulated time period or before the expiry of their validity. Assessment and marking in assignments and live classes is done by the faculties of Boston Training Academy.
- 13. Assignment Submission Deadline:** On or before 7 days from release of assignment.
- 14. Grading:** - The grades are allocated as follows.

Grading Criteria		
S. NO.	Marks Obtained	Grade
1.	90% and above	A+
2.	80% - 90%	A
3.	70% - 80%	B+
4.	60% - 70%	B
5.	50% - 60%	C+
6.	40 - 50%	C
7.	Less than 40%	Fail

- 15. Job Opportunities :** -
- Junior Data Scientist
  - Business Analyst
  - Assistant Manager- Analytics
- 16. Certification:** - Certificate of completion is provided jointly by CSC Academy and Boston Training Academy.