

UG Department of Mathematics offers AN ONLINE COURSE

PYTHON FOR MATHEMATICS

Our course aims to equip learners with the knowledge and techniques necessary to leverage computational tools for solving intricate mathematical problems. The acquired skills will enhance individuals' capabilities, bridging traditional mathematical knowledge with a power of computation, offering a valuable asset to broaden thier expertise.

Course Details:



COURSE INTRUCTOR Mr Larson Monteiro Business Analyst Tekzen Systems, Mysore HURRY UP &

Register at: https://sac-elearning.com/courses/https-sacelearning-com-courses-python-for-mathematics/

Ms Priya Monteiro HOD, Mathematics Rev.Dr Praveen Martis SJ Principal

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Ms Melvita Barette, Assistant Professor, Department of Mathematics
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PYTHON FOR MATHEMATICS

Course type: Certificate Program Title: Python for Mathematics

Course Description:

Python is a popular language and widely used in many areas due to versatile in nature. This course focuses on to add a new feather to your cap through gaining a new skill. Additionally, if you are hesitant to take up due to your background not being in computer science, well then, this shouldn't stop you. Python can help you achieve your academic, professional, and may be sometimes personal goals. Instructions and illustrations will be simple. It can help you improve your understanding and aptitude skills. Mathematics with Python will be a new dimension that you will explore in this course. You will appreciate the beauty of equations when visualized.

This course will be conducted by Mr Larson Monteiro, an external faculty, from the IT industry in collaboration with the Department of UG mathematics, St Aloysius (Deemed to be University), Mangalore.

Course details:

- **Course duration:** 30 hours which comprises of video lectures, reading material and quizzes.
- Course fee: Rs 500
- Target Audience: Open to all
- Enrolled students shall dedicate at least 2 hours towards the course per week.
- The course can be accessed through St Aloysius College e-learning platform: https://sac-elearning.com/courses/https-sac-elearning-com-courses-python-for-mathematics/
- E certificate will be provided on successful completion of the course.

Course syllabus:

UNIT I : ABCs of Python

- a. What is python?
- b. What can Python do?
- c. What is Python Good for?
- d. How to Install Python?
- e. Python Syntax.
- f. How to execute Python statements and file? Research!
- g. Python Indentation
- h. Variables, Statements
- i. Data Types
- j. Numbers, Casting
- k. String, Boolean

UNIT II: Structure of Python

- a. List
- b. Tuple, (Working with sequence Book)

- c. Sets
- d. Dictionaries
- e. IF, IF Else
- f. While loop, For loop

UNIT III: Advancing in Python

- a. Function
- b. Lambda functions
- c. Classes
- d. File handling

UNIT 4: Matplotlib & Numpy

Scheme of Examination: Duration of Exam: 45 minutes Number of Questions: 30 (Each question carrying 1 mark)

Minimum passing grade: 50%

For more details, contact course co-ordinator:

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