

Department of Physics
Mahatma Gandhi College Iritty

Certificate Course
in
Python programming

Module I: Programming in Python (23hrs)

Introduction to programming -Getting started with python-Variables and data types-operators and their precedence-python strings-Slicing-python lists-mutable and immutable types-input from the key board-iteration: while and for loops-condition execution: if, elif and else-modify loops-line joining-functions python modules and packages-file input/output-formatted printing-exception handling-turtle graphics.

Module II:(7 hrs)

Arrays and matrices: The NumPy Module - creating arrays and Matrices- copying -arithmetic operations- cross product- dot product -saving and restoring-Matrix version.

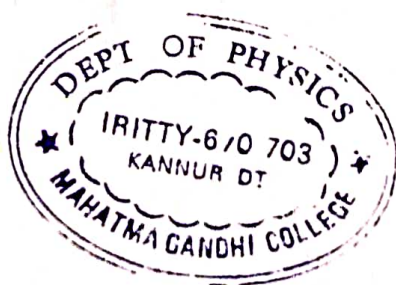
Module III: (7 hrs.)


Data visualization: The Matplotlib Module- plotting mathematical functions- famous curves-power series-2D plot using colors.

Books for study:

1. Python for Education: by Ajith kumar B.P ; freely downloaded from the site:
<http://expeyes.in/python-programming>.

Note : Installation of GNU/LINUX which contains in built python interpreter are mentioned in detail in the above book. To install Python in windows operating system: Go to the link <http://www.python.org>




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