



**M.G. SCIENCE INSTITUTE, AHMEDABAD**

(AUTONOMOUS)

AFFILIATED TO GUJARAT UNIVERSITY  
MANAGED BY AHMEDABAD EDUCATION SOCIETY  
NAAC "A" Grade 3rd Cycle | GSIRF 4 Star Ranking



## BASICS OF PYTHON PROGRAMMING

### ABOUT M G SCIENCE INSTITUTE

M. G. Science Institute has been a temple of learning for almost seven decades. Established in 1946, the Institute is affiliated to Gujarat University and has a grant-in-aid status from the govt. of Gujarat. It has carved its path to eminence through sheer dynamism and dedication of its founder fathers and educators. M. G. Science Institute is a leading institute offering Undergraduate and postgraduate degree courses in various disciplines of science. Offers the highest number of degree courses 13 at the graduate level and 3 at the postgraduate level.

### RATIONALE OF THE PROGRAM

The Python programming language is the most widely used programming languages among the data scientists and researchers for statistical data analysis and machine learning techniques. Being an open source software, it is freely available and allows integration with other applications. Python is useful for academicians and industry people at different levels. The objective of the workshop is to provide basic understanding of statistical concepts and analysis using Python programming.

### WHO SHOULD ATTEND?

- Students (UG/PG)
- Research Scholars from various domains
- Faculty Members

**Duration :** 5 Days (30 hours)

**Mode :** Offline

**Dates :** 10-15 May 2024

**Time :** 11:00 am to 05:30 pm

### COURSE OUTCOMES

- Learn the importance of the data and various aspects of data handling.
- Get familiar with data structures in Python programming.
- Learn how to install different libraries in Python
- Basics of Python programming.
- Learn about built-in functions and user-defined functions in Python
- Get familiar with Python libraries like Numpy, Pandas, Matplotlib, Seaborn
- Learn about one-hot encoding

### FEATURES:

- **30 hours of Hands-on Training on Python and Jupyter Notebook.**
- Discussion of related case studies.
- Interaction & learning with experts from academia.
- Certificate to the participants
- Batch Size: 50

### SESSION CONTENTS

- Introduction to Python and Jupyter Notebook
- Python Objects & Data Types
- Python Data structures
- Operators in Python
- Python Conditional Statements
- Python Looping Constructs
- Functions in Python
- Python Modules and packages
- Numpy, Pandas, Matplotlib, Seaborn
- Label Encoding and One-hot Encoding

## FACILITATORS

### DR. RAJU CHAUDHARI

He is an Associate Professor of Statistics at M. G. Science Institute, Ahmedabad. He has academic experience of more than 28 years. He has obtained his B.Sc. degree from the University of Pune, M.Sc. and Ph. D. in Statistics from Sardar Patel University, Vallabh Vidyanagar. He has published several research papers in national and international forums. His teaching area includes Probability and Distribution Theory, Statistical Inference, Design of Experiments, Survey Sampling, Quantitative Techniques, Operations Research, and R Programming. He has been the key resource person for Research Data and Statistical Analysis workshops Using R programming, Python programming, Jamovi, SPSS and MS-Excel, organized at various institutions. Additionally, he worked as a project consultant to Develop On-line Data Exploration Tool for ICSSR Project at Inlibnet Gandhinagar Using R, R studio and Shiny. He has also provided consultancy services for the project "Commodity prediction using R programming" for Bombay Softwares.

### DR. PARAG SHAH

He is a full-time professor of Statistics at H. L. College of Commerce, Ahmedabad. He has academic experience of more than 23 years. He has completed a Ph. D. in Statistics from Gujarat University, in 2008. He has pursued a Masters of Philosophy in Statistics from Gujarat University and Masters of Science in Statistics from the same university as part of his professional education. He completed his Bachelor of Science in Statistics from St. Xavier's College, in 1994. He has also undertaken various courses from renowned institutes like CMC Vellore, IIT Kharagpur, IIT Hyderabad and Duke University USA. He is an active member of various national and international bodies working in the field of Statistics namely, the International Indian Statistical Association and Executive Committee of Gujarat Statistical Association. He has more than 20 published research papers to his credit. He has also authored more than 8 books of Statistics including two in well known publisher like TATA McGraw-Hill. He had conducted a number of workshops for Data analysis using R programming, Python programming, Jamovi, MS Excel and SPSS for domains like sports, education, life sciences, commerce and more.

### REGISTRATION FEE

#### Fee per Certificate Course:

UG/PG Students: INR 3000 + 18% GST

Persons from Industry : INR 3500 + 18% GST

#### All the Three Courses Discount:

UG/PG Students: INR 8000 + 18% GST

Persons from Industry : INR 9500 + 18% GST

### ACCOUNT DETAILS

**Account Name:** M/S/ M.G. Science Institute,  
Self Finance Program

**Bank Name:** ICICI Bank Ltd.

**Account No.:** 136701002677

**IFSC Code:** ICIC0001367

### Payment Details



### REGISTRATION DETAILS

1. Payment can be made through Internet Banking, Google Pay or Paytm or PhonePe or UPI.
2. Registration form can be filled after paying fee of the workshop by clicking on the link <https://bit.ly/mgscience>
3. Confirmation would be intimated after verification of payment.

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