

PROGRAM PEDAGOGY

- Classroom sessions
- Hands-on training on computer
- Case-based learning
- Hands on exercises and quizzes
- Individual Assignments
- Get real-world experience through projects
- Capstone project

CURRICULUM

SEMESTER-I



Introduction to Business Analytics

- Overview of Business Analytics
- Applications of Business Analytics
- Understand Data Analytics Cycle
- Role of Analytics in Decision Making
- Types of Analytics
- Tools Used in Data Analytics

01



R Programming

- Basics of R & RStudio
- R Data Types, Data Structures
- Control Structures
- Functions and Packages in R
- Writing & Running R Scripts
- Data Handling in R
- Data Wrangling in R
- Data Visualization

02



Python Programming

- Basics of Python Language
- Python Data Structure
- Control Flow
- Functions Module & OOP
- Exceptions Handling, File I/O
- Modules and Packages
- Numpy and Pandas Libraries
- Matplotlib and Seaborn

03



Database Management & SQL

- Introduction to Database
- Introduction to SQL
- Installation of SQL Server
- DDL and DML Statements
- Databases and Tables
- Aggregate Functions
- Join & Set Operations
- Sub-queries & Derived Tables

04



Statistical Techniques for Data Science

- Basic Concepts of Statistics
- Statistical Inference
- Estimation of Parameters
- Basic Concepts of Hypothesis
- Parametric Tests
- ANOVA, ANCOVA
- Non-parametric Tests
- Linear Regression

05



SEMESTER-II



Data Visualization with Power BI

- Intro. to MS Power BI
- Data Transformation
- Model Data with Power BI
- DAX:Data Analysis Expression
- Power Bi Dashboard
- Direct Connectivity in Power BI
- Datasets in Power BI
- R and Python in Power BI

06



Machine Learning Part I

- Machine Learning Concepts
- Logistic Regression
- Decision Tree
- K-nearest neighbour
- Random Forest
- Naive Bayes Classifier
- Support Vector Machine

07



Machine Learning Part II

- Hierarchical Clustering
- Non-Hierarchical Clustering
- Market Basket Analysis
- Factor Analysis
- Text Mining

08



Time Series Models

- Intro. to Time Series Data
- Components of Time Series
- Decomposition of Time Series
- Forecasting
- Exponential Smoothing
- ARMA model
- ARIMA Model

09



Capstone Project (Any One)

- Retail Analytics
- E-commerce
- Sports Analytics
- HR Analytics
- Finance Analytics
- Marketing Analytics
- Insurance Analytics
- Healthcare Analytics
- Social Media Analytics

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TOOLS USED



LEARNING OUTCOMES

- Cultivate data-oriented abilities
- Address intricate business challenges through data analytics
- Craft solutions for practical business dilemmas using data-driven approaches



WHO CAN APPLY?

- Bachelor in any discipline from any recognised University (with Mathematics or Statistics at 10+2 level)
- Minimum 50% marks at Bachelor Degree

PROGRAM DURATION

- 12 Months (Two Semester) (Offline)
- June 2024 to May 2025

EVALUATION


- A minimum 75% attendance is a prerequisite for successful completion of this programme.
- There will be periodic evaluation. These may be in terms of quiz, assignment, project.
- At the end of the semester, there will be final examination.

PROGRAM FEE

- 45,000/- per Semester
- Fee inclusive of GST
- Fee includes Admission, Tuition, Course Material

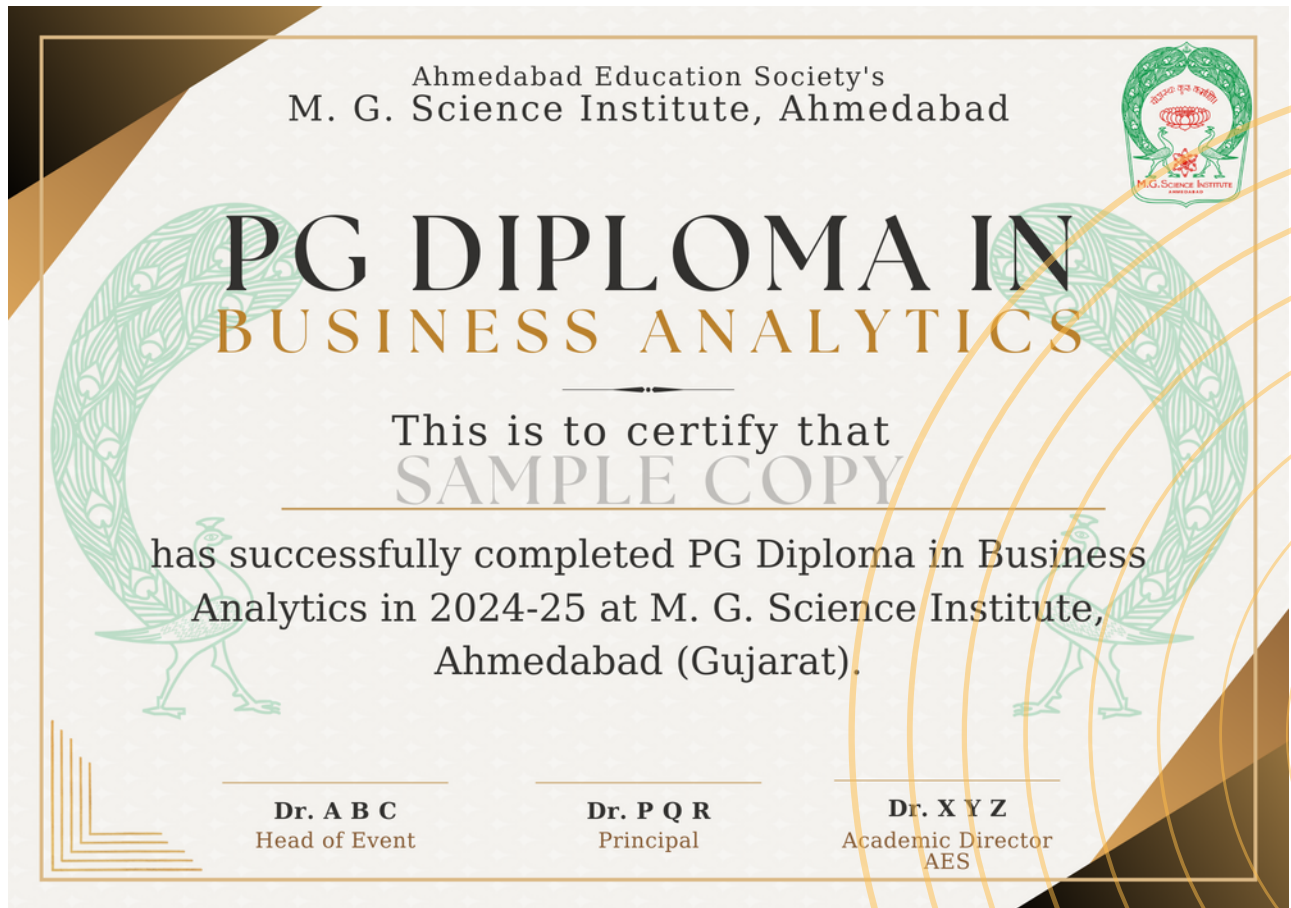
HOW TO APPLY?

- Fill the application form.
- Evaluation of Candidate.
- Get the Provisional Admission Offer Letter
- Payment of Fee
- Get the Confirmation Letter

 **Enroll today to experience a program that offers expert mentorship, practical application, and a pathway to becoming a knowledgeable and capable professional.**

PROGRAM CERTIFICATE

Awarded PG Diploma in Business Analytics certificate after the completion of the program. Participant must fulfill requirements and other policies prescribed by M. G. Science Institute.



GET IN TOUCH



M. G. Science Institute, Ahmedabad



+91 0000000000



mgdatasciencelab@gmail.com



mgscience.ac.in

VENUE :

M G DATA SCIENCE LAB (MGDSL)

M. G. Science Institute, Ahmedabad

Dada Saheb Mavlankar Campus,

Opp. Gujarat University, Navrangpura,

Ahmedabad-380009



+91 0000000000



mgscience.ac.in



mgdatasciencelab@gmail.com

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