



**Diploma in  
Data Science for  
Decision Making**

## About IIRM

The Institute has been in existence for over a decade and is mandated to deliver excellence in education that meets the changing need of the rapidly-growing Industry and Economy at large, with the sole aim of developing an employable workforce. It is unique in character as the Institute is promoted by the Regulator IRDAI and Govt. of Telangana.

Institute is dedicated to education in the financial services sector, which includes courses on Finance & Financial Services, Insurance, Risk Management, Actuarial Science, Marketing, Business Analytics, and allied areas.

Institute constantly endeavors to provide its students with excellent learning through experiential methodology and curriculum that matches contemporary industry requirements.

## About the Course

IIRM has been a pioneer in regard to Business Analytics in India. A one-of-a-kind programme, Diploma in Data Science for Decision Making, offered by the Institute is open to any Graduate who is keen on pursuing a career in the field of Analytics and Data Science.

Students will be trained starting with Statistics to working hands-on with Machine Learning models using the world's most popular and powerful programming language. The course is designed to prepare students for an entry level career in Data Science and to up skill professionals already working in this field by expanding their capabilities.

## Faculty

The sessions will be handled by faculty from IIRM, who are specialists in Data Science and Analytics domain, and have rich Professional experience.

## Eligibility

Any graduate with a knowledge of high school level Mathematics / Statistics.

## Course Schedule

**The course will be for 6 months duration**

**Admission Notice** : Last week of November 2020

**Commencement of admissions** : Second week of December 2020

**Classes commencement** : 23rd January 2021

These dates are provisional and subject to change.

## Fee

Rs. 50,000/- + GST (can be paid in two instalments)

**First Instalment** : Rs.25,000+GST at the time of Admission

**Second Instalment:** Rs.25,000+GST in the month of April 2021

**Bank Details :** All payments made could be remitted in the form of DD / RTGS / NEFT/ Net banking Transfer (online) all in favour of “**Institute of Insurance and Risk Management**” payable at Hyderabad. Details follows :

<u>ICICI Bank Limited</u>	<u>SBI Bank</u>	<u>Andhra Bank</u>
A/c No. : 007601014173	A/c No. : 10276213726	A/c No. : 183910100002272
Branch : Financial District	Branch : Yellareddyguda	Branch : Nanakramguda
NEFT/IFS Code : ICICI0001804	NEFT/IFS Code : SBIN0003257	NEFT/IFS Code: ANDB0001839
MICR No. : 500229007-014173	MICR No. : 500002057-000118	MICR No.:5000011173-000004

## Teaching Methodology

The Lecture sessions will be conducted through online in an interactive mode as mentioned below:

**Saturdays** : 10.00 am to 01.00 pm

**Sundays** : 10.00 am to 12.00 noon

## Assessment

- Assignments
- Capstone Case Analysis
- Regular Quizzes to be conducted online by IIRM
- Minimum attendance 70%

## Certification

IIRM shall carry out the assessments and evaluation required for certification. IIRM will directly award a certificate to the participants who complete the programme successfully. Giving feedback is an integral part of the completion requirements of the programme.

### For more details contact

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## Institute of Insurance and Risk Management (IIRM)

Financial District, Gachibowli, Hyderabad – 500 032

Ph: +91 - 40 2300 0005

## TOPICS

### **Introduction to Data Science**

Overview of Data Mining, Machine Learning, Artificial Intelligence and Big Data.

### **Mathematics**

Number Systems – Matrices – Differentiations – Integrations.

### **Statistics**

Summarising the data - Concepts of probability - Random Variable - Discrete Probability Distributions - Continuous Probability distributions - Sampling and Statistical Inference - Confidence intervals - Hypothesis testing - Correlation analysis and regression analysis – ANOVA.

### **R Programming**

Introduction to R Environment – Programming in R – Data Preparation & Visualization – Data Analysis.

### **Python Programming**

Introduction to Python – Python Data types – Control Statements – User defined Functions – Number and String Functions – Modules and Packages – Object Oriented Programming – Exception Handling.

### **SQL**

Introduction – SQL Data Types & Operators, Operations in SQL, Aggregating Data in SQL, Writing Sub-Queries in SQL, Common functions in SQL, DDL Statements, DML Statements, Constraints, Joins, Views.

### **Tableau**

Concept of Measures Vs Dimensions - Tableau Basics - Creating a Fully Functional Dashboard Solution.

### **Machine Learning**

Introduction to Machine Learning – Choosing Machine Learning Algorithm – Classification Algorithms – Clustering Algorithms – Frequent Pattern Mining Algorithms

### **Natural Language Processing**

Introduction to NLP – Text Processing – Part of Speech Tagging with Hidden Markov Models.

### **Time Series Analysis**

Components of Time Series – Methods of Estimation.