



UpGrad & IITB

PG DIPLOMA IN DATA ANALYTICS

11 MONTHS | ONLINE



UpGrad is an online education platform to help individuals develop their professional potential in the most engaging learning environment. Online education is a fundamental disruption that will have a far-reaching impact. At UpGrad, we are working towards transforming this online education wave into a tsunami! We are taking a full-stack approach of leveraging content, technology, marketing and services to offer quality education at scale in partnership with corporates & academics to offer a rigorous & industry relevant program.

Based on our market research and conversation with the industry, we have identified Data Analytics as one of the sectors with critical supply demand imbalance. Our vision is to design and deliver a quality online Postgraduate Program in Data Analytics to drive the growth of the sector and make India a global hub for data analytics.

If you are reading this, you may wish to accelerate your career in Data Analytics. With UpGrad, we promise to equip you with the perfect mix of business acumen and technical capabilities to help you achieve exactly the same.

Ronnie Screwvala

*Co-Founder
UpGrad*



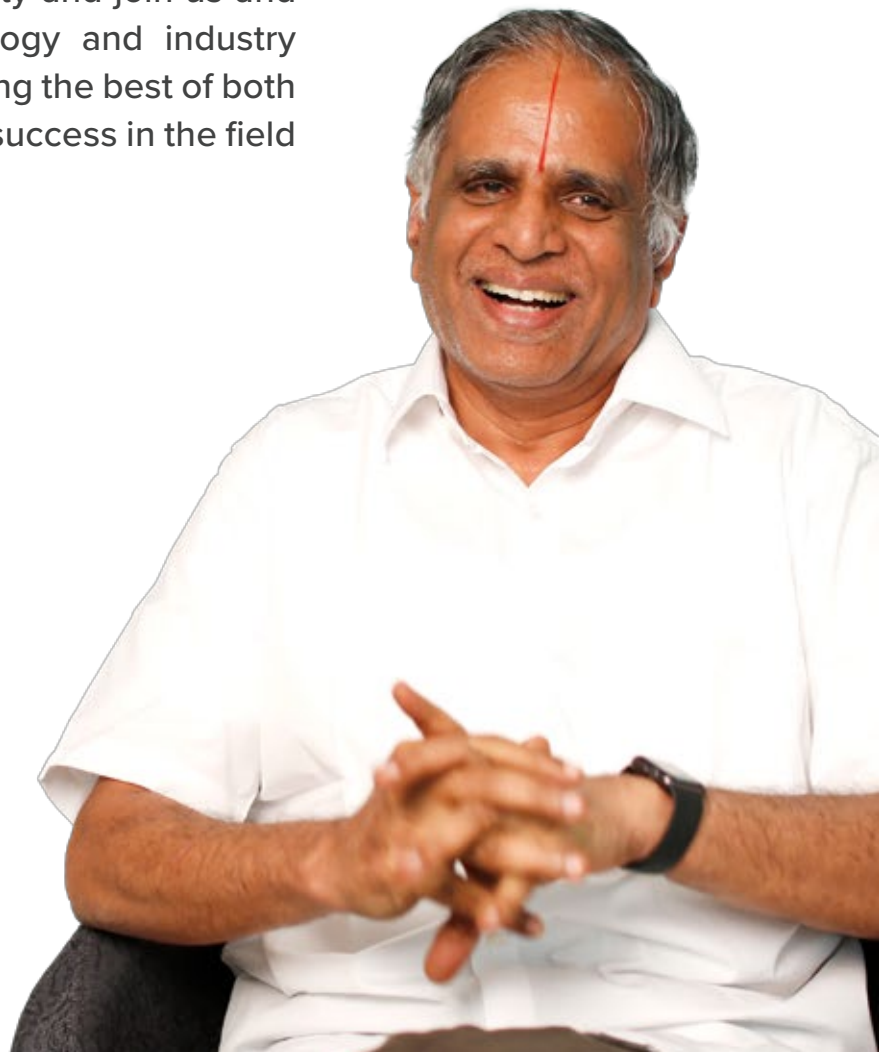
IIIT-B is well respected in the global academic circles as well as in the global analytics and IT industry. We have outstanding world class faculty, with years of experience, in charge of running the Analytics Essentials Executive Education Course.

We are excited to partner with UpGrad to offer a one-of-its-kind, academically rigorous and industrially relevant PG Diploma Program in Data Analytics. IIITB's faculty will be discussing the conceptual depths of topics such as DS, ML, BDA and this will be complimented by industry relevant case studies from major industry verticals by industry leaders from UpGrad's industry network. Further, our strong placement network, industry mentorship and the credibility of a PG Diploma Program will provide you just the right push to accelerate your career in Data Analytics!

We invite you to take this opportunity and join us and make use of the excellent pedagogy and industry collaborations. You will truly be getting the best of both worlds, which will help you achieve success in the field of Data Analytics.

Prof. S. Sadagopan

*Director
IIIT Bangalore*



WHY DATA ANALYTICS WITH UPGRAD & IIIT-B?



PG DIPLOMA FROM IIIT-B

Earn a reputed Post Graduate Diploma without leaving your job



CAREER SUPPORT

Get access to career coaching services and get introduced to the right opportunities to upgrade yourself



DOMAIN SPECIALIZATION*

Choose among BFS, E-commerce or Healthcare & build a resume showing expertise in one of the largest sectors in the world



FOR THE INDUSTRY, BY THE INDUSTRY

Receive mentoring from industry leaders and be ahead of the curve by learning what the industry needs



ON-THE-GO LEARNING

400 hours of lectures squeezed into 30 mins learning sessions anywhere – anytime



STUDENT MENTORSHIP

Academic/non-academic mentorship and unparalleled peer-to-peer learning

**An elective would be launched only if there is a sizeable student demand for the particular elective*

INSIGHTS FROM INDUSTRY EXPERTS



TEJAS SANGHVI
Vice President
Fractal Analytics



ANSHUMAN GUPTA, PHD
Director - Data Science
Pitney Bowes



UJJYAINI MITRA
Head of Analytics
Viacom 18



S. ANAND
CEO
Gramener



SAMEER DHANRAJANI
CSO
Fractal Analytics



KALPANA SUBBARAMAPPA
Ex-Assis. VP, Decision Sciences
GENPACT



SAI ALLURI
PRO Analytics &
Strategy Manager
Uber



HINDOL BASU
Partner
Tata IQ

CONCEPTS FROM TOP ACADEMICIANS



TRICHA ANJALI
Associate Professor
IIIT Bangalore



PROF. S. SADAGOPAN
Director
IIIT Bangalore



**CHANDRASHEKAR
RAMANATHAN**
Dean (Academics)
IIIT Bangalore



DINESH BABU JAYAGOPI
Assistant Professor
IIIT Bangalore



G SRINIVASARAGHAVAN
Professor
IIIT Bangalore

PROGRAM CURRICULUM

Note: This curriculum is subject to change based on inputs from IIITB and Industry.
Modules marked as (*) are optional.

INTRODUCTION TO DATA MANAGEMENT

LANGUAGE OF DATA ANALYTICS

Learn tools and languages used for data analysis - R, Excel, SQL, Python & Tableau.
These modules are also part of the preparatory course

INTRODUCTION TO DATA WAREHOUSING AND OLAP

Equip yourself with the knowledge to extract and pre-process data before analysis

DATA PREPERATION

Learn how to prepare data before analysis

CASE STUDY- INVESTMENTS

Implement your learnings to find sectors in which different companies ought to invest

STATISTICS AND EDA

DATA VISUALIZATION

Make your data alive with visuals using R and tools like Tableau

DESCRIPTIVE STATISTICS

Summarize and describe data sets using measures such as Central tendency and variability

INFERENTIAL STATISTICS

Learn probability, Central Limit Theorem and more to draw inferences

EXPLORATORY DATA ANALYSIS

Derive initial insights from the data using R and other visualization tools

HYPOTHESIS TESTING

Understand how to formulate & test hypotheses to solve various business problems

CASE STUDY-UBER SUPPLY-DEMAND GAP

Apply Statistics and understand how Uber solves its supply-demand gap

INTRODUCTION TO PREDICTIVE ANALYSIS I

LINEAR REGRESSION

Learn to implement linear regression and predict continuous data values

SUPERVISED CLASSIFICATION

Understand and implement algorithms like K-NN*, Naive Bayes and Logistic Regression

CLUSTERING

Learn how to create segments based on similarities using K-Means and Hierarchical clustering

CASE STUDY - TELECOM CHURN

Learn how a telecom giant predicts its customer churn. Apply multiple algorithms simultaneously to see which one works the best

INTRODUCTION TO PREDICTIVE ANALYSIS II

TIME SERIES

Learn how to make predictions using time dependent/variant data

DECISION TREES

Tree-based model that is simple and easy to use. Learn the fundamentals on how to implement them

SUPPORT VECTOR MACHINES

Learn to classify data points using support vectors

NEURAL NETWORKS*

Master Feed-forward, Recurrent and Gaussian Neural Networks. This is your way into AI!

ASSOCIATION RULE MINING*

Ever wondered why beer is kept next to diaper in superstores? Find out in this module

BIG DATA ANALYTICS

INTRODUCTION TO BIG DATA AND HADOOP

Understand the basic concepts of Big Data and Hadoop as processing platforms for Big Data

MANAGING BIG DATA

Learn and use Hadoop ecosystem tools like Sqoop & Hive for data ingestion, extraction and management.

INTRODUCTION TO SPARK

Understand and use Spark, a fast Big Data processing platform

BIG DATA ANALYSIS

Learn how to analyze Big Data using SparkR, SparkSQL

DOMAIN ELECTIVES**

BFS

Learn Customer analytics and Risk Analytics within BFS

E-COMMERCE

Learn customer marketing analytics and recommendation engines

HEALTH CARE

Understand use of analytics in Healthcare improvement and drug discovery

CAPSTONE PROJECT

Build your expertise in one of the largest sectors in the world by taking up a 2-month capstone project.

** An elective would be launched only if there is a sizeable student demand for the particular elective

SUCCESS STORIES



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The assignments and case studies are the ones that will really give you a mileage during the job interviews. Through UpGrad and IIIT-B career support, I have secured an offer from an MNC. I have learnt quite a lot from peer discussions. All-in-all UpGrad & IIIT-B program can really help you transition your career to data analytics.

-Antarik, Network Engineer, USEReady



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I was sceptical even after my admission in the UpGrad & IIIT-B PGDDA program thinking it is an online pilot program. But I soon realised otherwise. This course covers deep concepts in DA and develops confidence in topics through challenging assignments. Team UpGrad is highly reachable & very prompt in addressing course-related concerns. Managing my work and concentrating on the course has never felt like a burden because of how thoughtfully the program is developed for working professionals.

-Kishore M, Sr. Associate - Projects, Cognizant



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The peer to peer interactions help a lot. It is brilliant to collaborate and learn with others even though it's an online program. IIIT-B is a good brand to have and the curriculum of the program is solid.

- Sajal Roychowdhury, Risk Analyst, Amazon India

PROGRAM STARTS

July, 2017*

DURATION

11 Months

PROGRAM FLOW

8-9 months - Interactive Learning

2-3 months - Industry mentored Capstone Project

WEEKLY COMMITMENT

6-10 hours per week (Depending on prior aptitude)

3-4 hours of asynchronous learning time,
1-2 hours of live session,
4-6 hours assignments & projects

PROGRAM FEE

INR 2,25,000 (Incl. of all taxes)

Flexible Payment Options Available

ELIGIBILITY

Bachelor's/Master's degrees with a minimum of 50% marks in graduation

SELECTION PROCESS

Selection test to assess quantitative and programming aptitude

For further details, call us at +91 22 61562137 or contact:



ROHIT SHARMA

Program Director

Rohit.Sharma@upgrad.com



SHUBHAM LOHADE

Chief Admissions Counsellor

analytics@upgrad.com

**Preparatory sessions will be starting from April 2017*