



॥ त्वं ज्ञानमयो विज्ञानमयोऽर्दसि ॥

**LIVE**

Online Sessions by  
ex-MAANG experts &  
IIT Jodhpur Faculty  
with campus immersion

# IIT Jodhpur PG Diploma in Data Science & Engineering



**12** months  
program

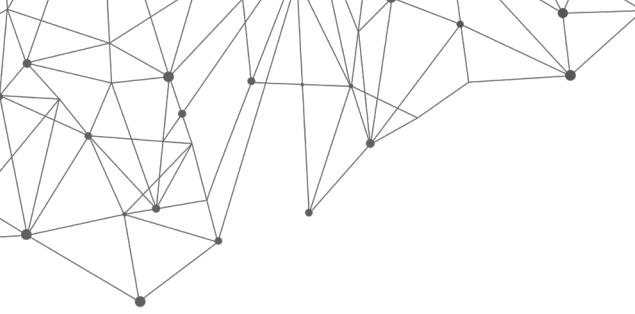
**IIT  
Alumni  
Status**

In collaboration with



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# Context

Data Science job opportunities in India are vast, and there are many opportunities for those with the right skill set. With the right training, data scientists can help businesses to improve their decision-making, gain insights into their customers, and automate their operations.

- A NASSCOM analysis projects that the Indian data analytics market will increase to \$16 billion in 2025.
- The demand for data scientists is at an all-time high in India with a prediction of around 11 million job openings by 2026. (Times of India, 2022)
- Data science professionals with 3-10 years of experience to get annual salaries in the range of ₹25 lakh to ₹65 lakh, which can go up to 1 crore.  
(Talent Trends Report 2021 by Michael Page India, 2021)

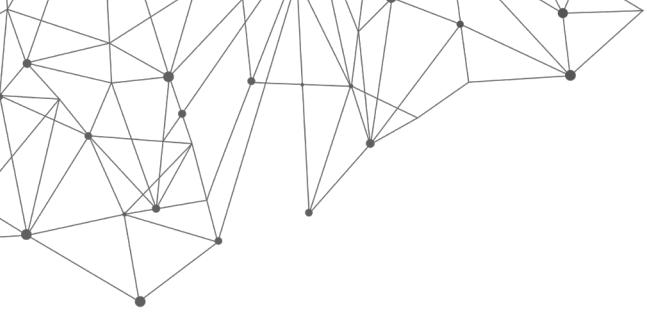


# About PG Diploma in Data Science & Engineering

Developed by IIT Jodhpur in collaboration with industry proponents, the 12-month intensive program weaves together academic lectures from top faculty from IIT Jodhpur, hands-on practical sessions, assignments, and capstone project to provide as experiential learning in Data Science & Engineering

In these 12-months, the students are expected to master the key technologies involved in generating insights from data that solve complex social and business challenges of today's world. In this program, the students will imbibe the technologies and methodologies to manage the complete lifecycle of a data engineering project - from big data collection to insight generation using machine learning techniques.



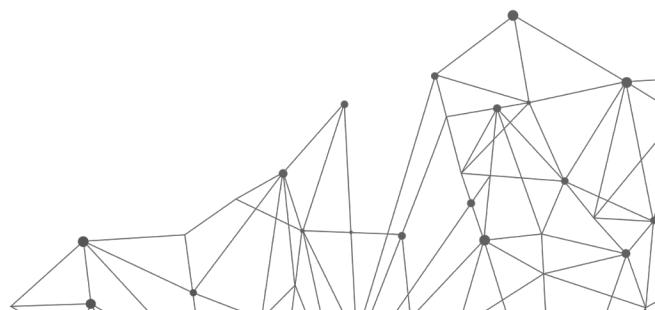


## This is for you, if...

-  you are aspiring for a high growth career in data field, either in the data science, ML track or the engineering and MLOps track and Engineering, this program will provide you with the right knowledge, tools, technologies and a prestigious IIT PG Diploma credential to accelerate your career.
-  you are an aspiring or a current software and technology professional, this PG diploma program will help you hone high in-demand skills such as big data engineering, cloud computing, and machine learning.

### Eligibility:

-  BTech in engineering, IT or science (4-year Program) or a B.Sc or master's degree in science, Math or Stats or relevant field, or an MCA
-  A minimum of 60% marks in UG/PG or a minimum CGPA of 6.0 on a scale of 10 with corresponding proportional requirements when the scales are other than 10.
-  - The applicant must be a working professional with a minimum of two years of work experience (after qualifying degree) at the time of registration to the Program.
  - The applicant must qualify the pre-screen test conducted by IIT Jodhpur or its appointed agency.)



# Program Highlights



## Next-gen Curriculum for a future-proof career

- Cutting-edge project-centric curriculum built by industry experts and IIT-Jodhpur Faculty after the emergence generative AI
- Application-oriented approach along with case studies & project work
- Transfer your credits towards Executive M. Tech Program by IIT Jodhpur

## The IIT Dream

- Attain PG Diploma Certificate by IIT Jodhpur
- Achieve IIT Jodhpur Alumni Status
- Become a part of IIT-J Alumni network
- Network with experts from Data & Analytics industry



## Hybrid Learning

- Live sessions on emerging tools & technologies like ChatGPT, Big Data, Cloud Computing & more
- Live Online Masterclasses by top industry experts
- 30 days campus immersion (10 days after each trimester)

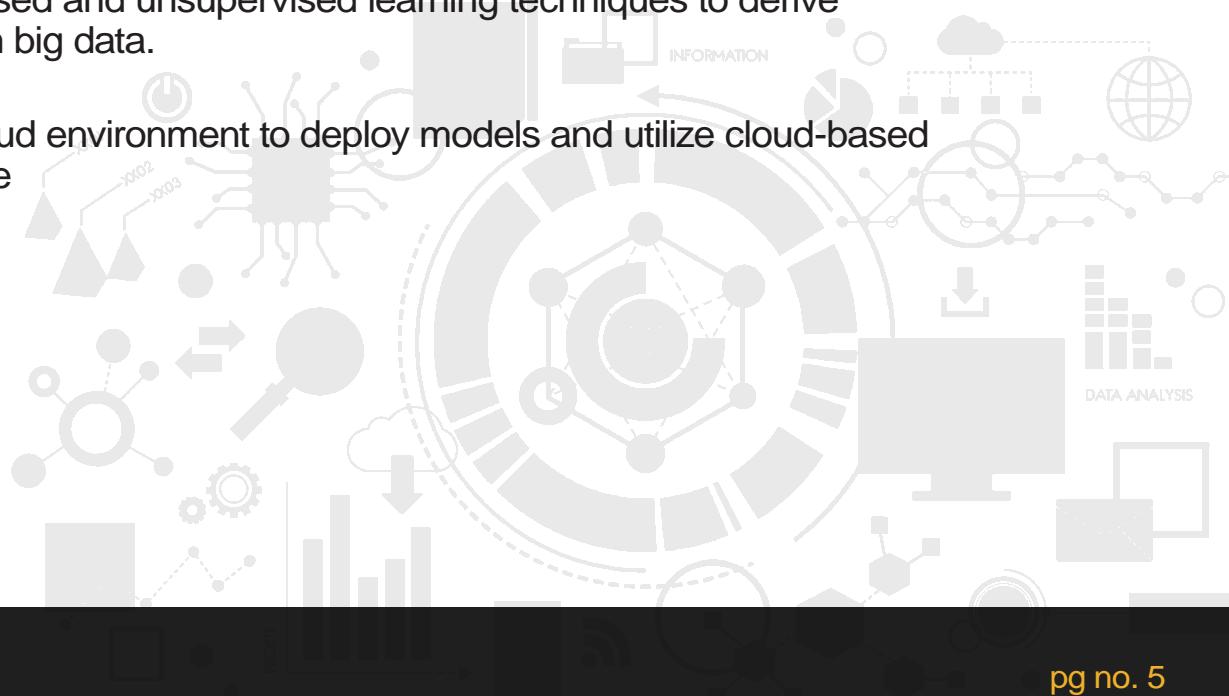
## Industry-tether with Futurense

- Fully Sponsored Futurense Bridge Course covering the foundations of the program
- Futurense Job Assistance

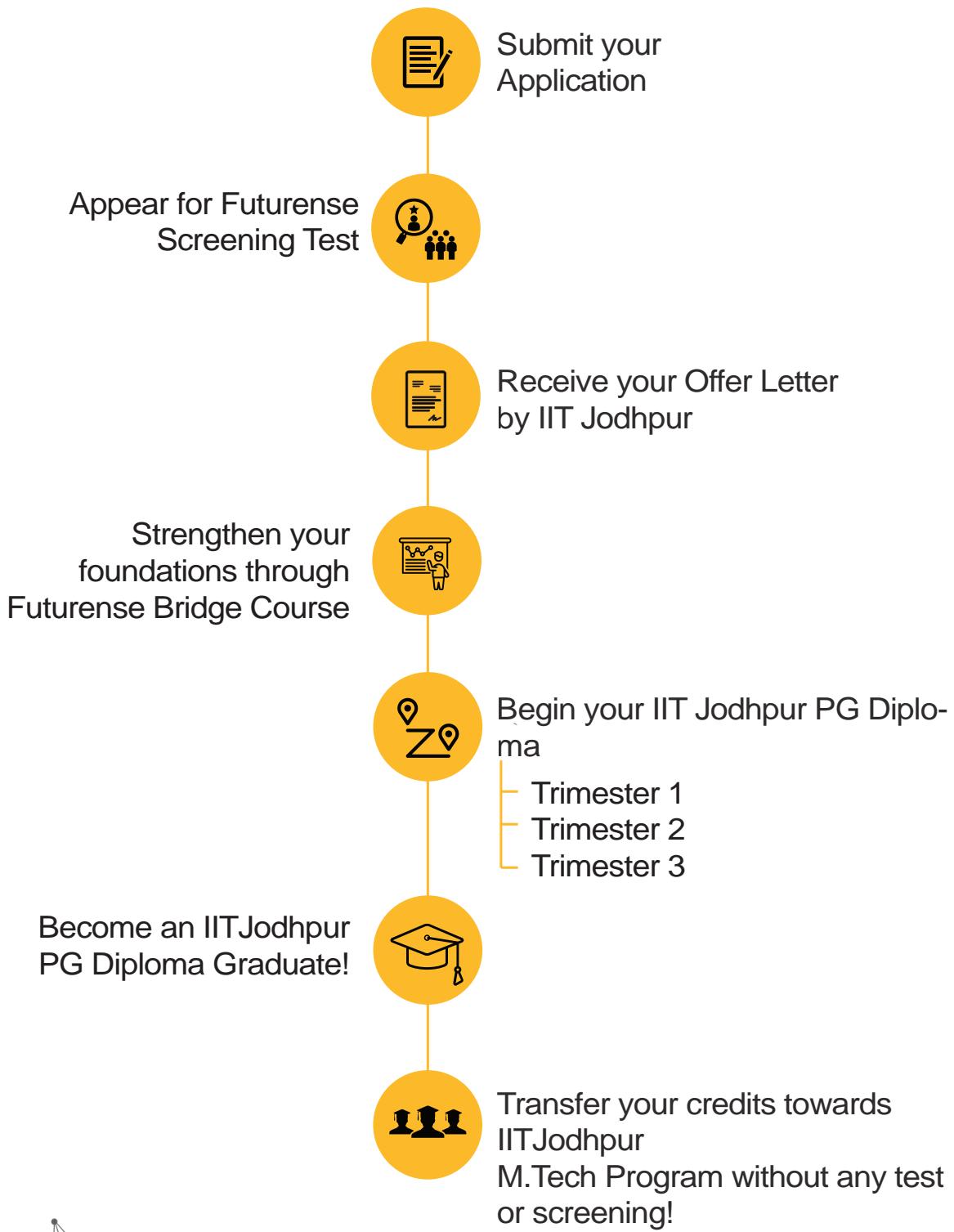


# Program Outcomes

- Be able to use python as well as the latest tools such as ChatGPT and Assistive AI for building data engineering solutions
- Design and work with modern databases, data models and ETL workflows, write applications to manipulate data thereof.
- Work with the latest big data technologies, ecosystems, and architect end to end data systems and infrastructures.
- Design and implement appropriate storage and processing techniques for every type of big data across domains.
- Deploy data mining techniques to discover insights from big data, design and deploy scalable dashboards and insights infrastructures.
- Create cloud data-based warehouses, build data lakes and use cloud infrastructure for data wrangling and transformation, leverage cloud AI and ML services and design a deployment strategy for a big data application and implement it successfully.
- Use supervised and unsupervised learning techniques to derive insights from big data.
- Work on cloud environment to deploy models and utilize cloud-based infrastructure



# Student Journey



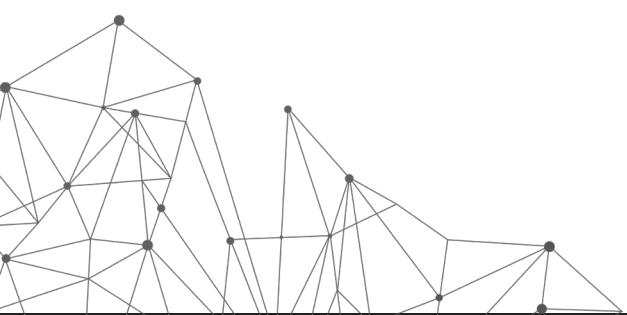
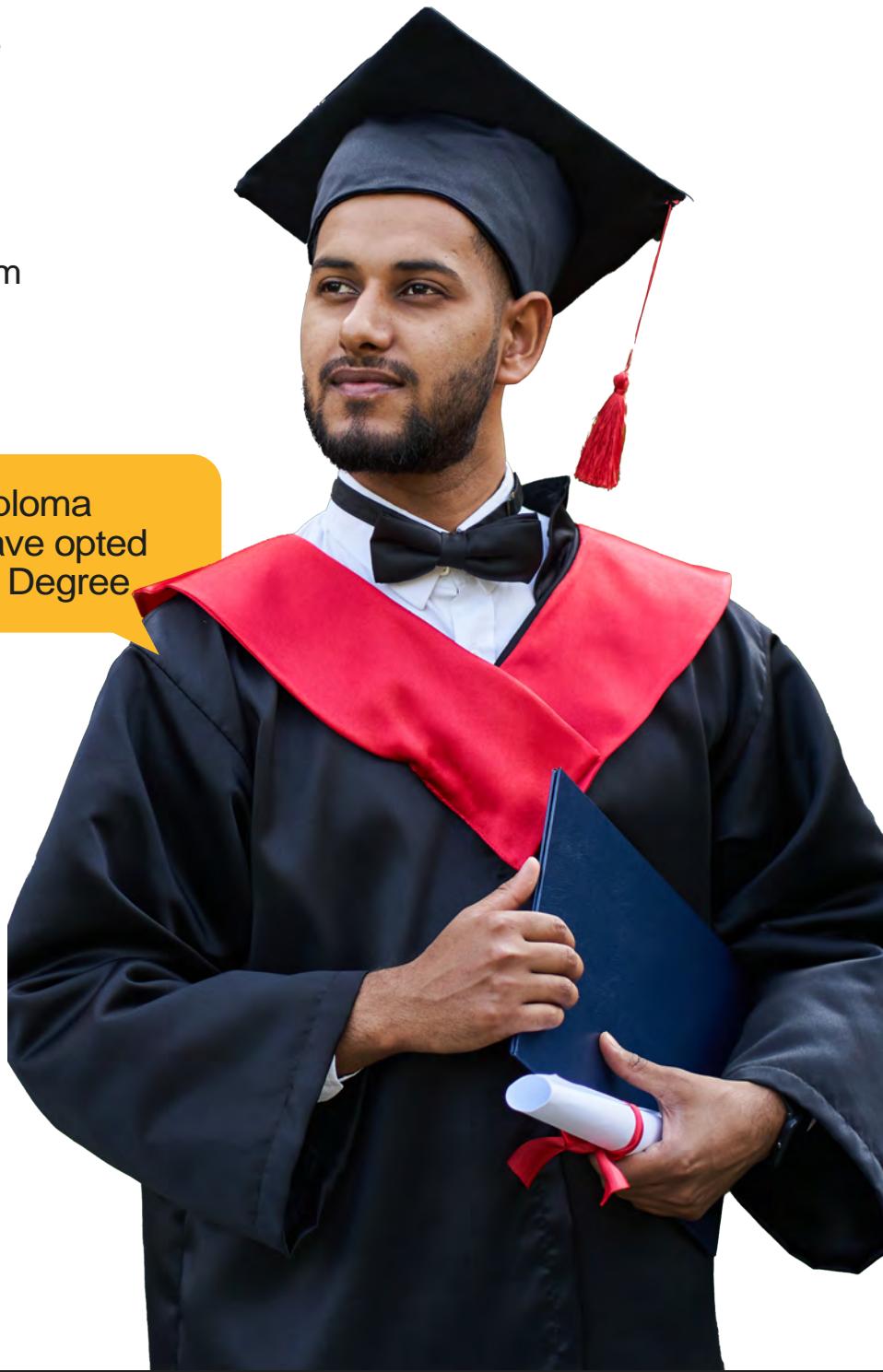
# **Post IIT-Jodhpur Diploma**

## **Executive M.Tech Degree in 1 year**

Opt for Executive M.Tech Degree from IIT-J, post completion of PG Diploma in Data Science & Engineering Program

For more information,  
write to [iitj.pgddse@futurense.com](mailto:iitj.pgddse@futurense.com)

100% of the PG Diploma Students in the past have opted for Executive M. Tech Degree



# Career Opportunities

## Potential Job Roles:

**Data Science Manager**

Salary

₹ 28L+

**Data Architect**

Salary

₹ 30L+

**Business Analyst Manager**

Salary

₹ 18L+

**Data Scientist**

Salary

₹ 20L - 50L

**Big Data Developer**

Salary

₹ 7L - 20L

**Data Visualization Specialist**

Salary

₹ 7L – 20L

**Data Mining**

Salary

₹ 12L -25L

**Machine Learning Engineer**

Salary

₹ 15L - 50L

**Business Intelligence Analyst**

Salary

₹ 10L-20L

**Research Scientist**

Salary

₹ 10L - 20L



# Career Opportunities

## Potential Recruiters:



**airbnb**

**ORACLE**

**Flipkart** The Flipkart logo, which is a yellow shopping bag icon with a blue 'f' inside.

**Google**

**amazon**

The Cisco logo, which consists of a series of vertical bars of decreasing height followed by the word 'cisco' in a blue sans-serif font.

**Uber**



**SIEMENS**

**NETFLIX**

**accenture** >

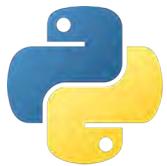
The Microsoft logo, which is a square divided into four colored quadrants (red, green, blue, yellow) followed by the word 'Microsoft' in a grey sans-serif font.

**& more**

# Tools Covered



Amazon  
SageMaker



Amazon **Redshift**



# Futurense Bridge Course

Don't think you're fit for an IIT? Worry no more!

Upgrade your foundational skills with Futurense Bridge Course  
at **NO additional cost.**

36+ hours of live online training and self-guided learning

- **Applied Math and Stats**
- **Problem Solving Using Python**
- **Project Management**  
**& more**



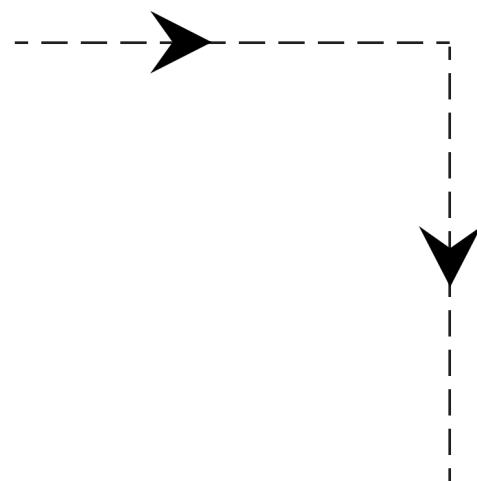
# Curriculum

## Trimester 1

Applied Mathematics and Statistics  
Programming Tools and Techniques for Data Science  
Database Design and Modelling

### Electives (Any 2)

Fundamentals of Business and Data Analytics  
Fundamentals of Data Science  
Data Visualization and Dashboards  
Cloud Fundamentals  
Data Mining & Warehousing



## Trimester 2

Machine Learning  
Distributed Systems and Platforms  
Web and Social Network Analytics

Electives (Any 1)  
Digital Marketing Analytics  
Financial Analytics  
Retail Analytics  
People Analytics

## Trimester 3

Big Data: Storage, Processing and Management  
Advanced Data Engineering with Cloud

### Electives (Any 1)

Stream Processing and Analytics  
Deploying Data Solutions - MLOps

# Program Directions



**Dr. Dip Sankar Banerjee**  
Assistant Professor  
at IIT Jodhpur

Dr. Dip Sankar Banerjee is an Assistant Professor at IIT Jodhpur since December 2020. He completed his PhD. in Computer Science and Engineering from the Indian Institute of Information Technology Hyderabad in 2014. He was a postdoc at the Ohio State University from 2015-2016. His research interests are broadly in the area of High Performance Computing, Computing Systems, Computer



**Dr. Subhash Bhagat**  
Assistant Professor in the  
Department of Mathematics  
at IIT Jodhpur

Dr. Subhash is an Assistant Professor in the Department of Mathematics at IIT Jodhpur in Rajasthan, India. They received their PhD from the Advanced Computing and Microelectronics Unit at the Indian Statistical Institute in Kolkata. Their research interests are in the areas of distributed systems and algorithms, specifically focused on distributed algorithms for Swarm Robots and Autonomous Multi-Agent systems, Internet of Robotic Things (IoRT), autonomous mobile robotic sensors, and security in distributed computing.

# Industry Mentors



Dr. Nishant Chandra  
Azure AI - Principal/Sr. Dir.  
Microsoft



Dr. Rohini Srivathsan  
National Technology  
Officer, Microsoft India



Anees Merchant  
Global Business Head  
Applied AI & Research  
at Course5 Intelligence



Dr. Sarabjot Singh  
CO Founder &  
Chief Data Scientist  
at Tatras Data



Sudalai Rajkumar  
Data Scientist at H2O.ai  
& Kaggle Grandmaster



Ganesh Mahadevan  
Head of New Age IT,  
Digital Transformation  
and Innovation at  
Bosch



Bhargab Dutta  
Senior Director IQVIA,  
Expert in Head of Digital  
& Analytics COE,  
Colgate- Palmolive India



Sasanka Panda  
Head of Technology -  
GDC and Multi-Industry,  
Capita



Chief Data Officer  
(Futurense Technologies),  
Ex-Director of Data Science  
(Cognizant)



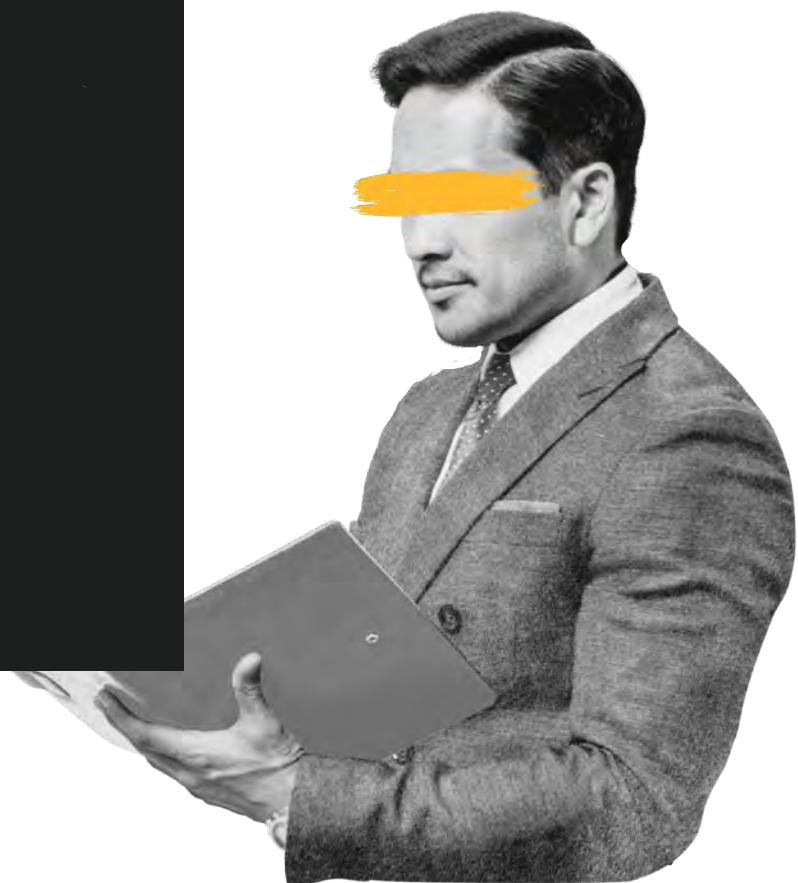
Anshu Pandey  
Co-founder & Head of  
Technology (Blue Data

# **Program Completion**

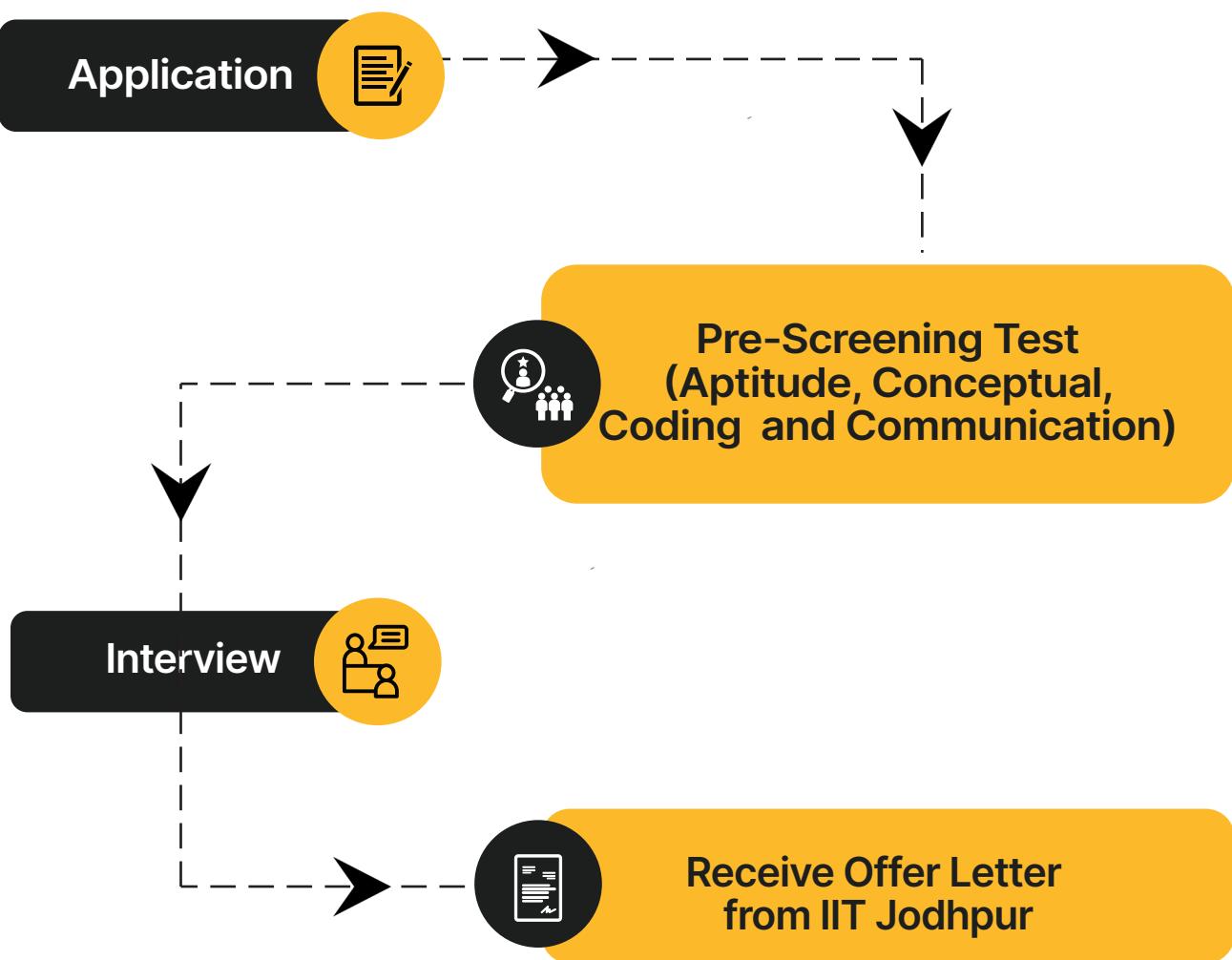


# Program Details

- Programme Duration:  
12 months | 330 Hours
- Programme Commencement:  
August 2023
- Program Fee:  
INR 3.10L
- Total Credits:  
35
- Learning Mode:  
Live Online Sessions + Campus Immersion of 30 days  
(10 days after each trimester)
- Program Schedule:  
Saturdays and Sundays: 3 hour sessions each day  
Weekdays: 4 hour sessions by Industry Experts



# Admission Process



# About IIT Jodhpur



Indian Institute of Technology Jodhpur (IIT-J) was established to foster technology education and research in India. It is committed to technological thought and action to benefit the economic development of India. Scholarship in teaching and learning; Scholarship in research and creative accomplishments; and relevance to Industry are three driving forces at IIT Jodhpur.

I-T functions from its sprawling residential Permanent Campus of 852 acres that is planned and envisioned to stand as a symbol of excellence in academics. It is the alma mater for more than 1000 alumni working at successful corporates in India and abroad and from different streams and specializations.

It is committed to a multidisciplinary approach to technology development and has established state-of-the-art laboratories for research. IIT-J has also organised its academic degree activities through Departments and coordinated research through Centres for Technologies.

# About Futurense



At Futurense, we build next-gen technology talent that hold the key to a smarter and tech savvier future.

Futurense Technologies is our talent solution business, focused on sourcing, building, and deploying next generation technology talent, specializing in high demand but limited supply talent areas such as data engineering, data visualization, data science, AI, cloud, full stack developer and similar job roles that are underpinned by data and emerging technologies.

Futurense enables availability of the right talent at the right time to global organizations by providing them access to a trained and deployment-ready talent pool. It also partners with universities to build future focused tech talent solutions at scale.

# **Experience being an IITian with Campus Immersions**

Campus immersion will be an essential element of the program experience, in which learners must attend the campus activities and sessions on campus (IIT Jodhpur campus) for 9-10 days per trimester. Campus immersion attendance is mandatory to earn the program certificate. Learners will get a live classroom experience, with the opportunity to meet and learn in person from the esteemed faculty at IIT Jodhpur and engage in peer learning or presentations and project work. Exams may also be held during the immersion period. However, note that based on unforeseen and sudden circumstances, it may be subject to cancellation/postponement such as based on future emergency circumstances/covid-19 advisory as issued by the government of India.

# IIT Jodhpur

## PG Diploma in

### Data Science & Engineering

## Enquire Now

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Rajasthan, India.
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-  [www.iitj.ac.in](http://www.iitj.ac.in)

