IIM NAGPUR
भारतीय प्रबंध संस्थान नागपुर
Indian Institute of Management Nagpur

Revolutionizing **DATA DRIVEN** Decision-Making

PG Certificate Programme in
Data Science for Business Excellence and Innovation

Batch 04

IIM NAGPUR

About IIM Nagpur

Established in 2015, the Indian Institute of Management Nagpur (IIMN) aspires to be a leading management institution that shapes management systems, policy and governance through high-quality education, research and industry engagement. Propelled by the pursuit of engaged scholarship, the Institute aims to create value-driven leaders and global managers with strong conceptual foundations and analytical approaches, which helps them excel in diverse spheres - be it management, business, policymaking, and public administration, to name a few.

IIM Nagpur aims to address the needs of a modern India; connecting aspirations and realities to attain benchmarks that are respected internationally. Our motto, सत्यं च स्वाध्यायप्रवचने चं, that is, an inspiring journey towards truth through individual reflection and collective discourse, propels our quest to bridge the gap between abstract knowledge and practice.

IIM Nagpur seeks to distinguish itself as an institution that promotes constant industry engagement of a 'problem-solving' nature. Executive Education, therefore, is an important thrust area for the Institute. With an array of programmes designed by a faculty body with a stellar record of research, teaching and industry engagement, the Executive Education programme at IIM Nagpur equips managers and executives with the capabilities to perform effectively in their current roles, and take up greater challenges through various stages of their careers.

Director's Message

> **With its unique advantages, IIMN is an exciting place to learn, grow and be the 'champions of change'.**

Dr. Bhimaraya Metri
Director, IIM Nagpur

I take pleasure to welcome you to IIM Nagpur (IIMN). IIMN was established in 2015 as the first of the third generation IIMs, by the Ministry of Education, Govt. of India at the orange city Nagpur which is equidistant (in terms of travel time by air) from major metropolises-Delhi, Chennai, Kolkata, Mumbai. Its' a thriving and fastest-growing city that stands positioned as the logistics capital of India, providing fertile ground for business ventures.

The striking feature of IIMN's state-of-the-art new campus, spread over 132 acres, is its location in the heart of the industrial hub within the country's first Multi-product Special Economic Zone at MIHAN, adjacent to Dr. Babasaheb Ambedkar International Airport, Nagpur. Thus, IIMN enjoys a natural advantage of being near to industry, enabling greater connections and partnerships with businesses across the sectors in SEZ and MIDCs. IIMN's unwavering focus on pioneering exceptional industry partnerships to lead the way in providing real-world experiences prepares our management graduates for life by bringing 'corporate into classrooms' to produce relevant talent for the corporate world.

Programme Director

Prof. Nikunj Kumar Jain
Faculty in the Production and
Operations Management Area, IIM Nagpur

Prof. Nikunj Kumar Jain is a faculty in Production and Operations Management at IIM Nagpur. He has completed his Fellow Program in Management (PhD) from IIM Indore and B.Tech (Electrical Engineering) from MANIT, Bhopal.

He has previously worked with IMT Ghaziabad, IMI Delhi and FORE School of Management Delhi and has cross-functional work experience in a green fieldrefinery project at Bharat Oman Refineries Ltd. Bina, Sagar (M.P.). He has conducted training programs on Operations Excellence, Supply Chain Management, Transportation Management, Project Management, Data Analytics, Scientific Rigor and Statistical Modelling to various industries for middle and senior management. He has also conducted workshops on Structural Equation Modelling and Research Methodology for academicians.

Prof. Sujeet Kumar Sharma
Faculty in Decision Science & Information
System Area, IIM Nagpur

Prof. Sujeet K. Sharma is a faculty in the Decision Science & Information Systems area at the Indian Institute of Management (IIM), Nagpur. Prof. Sharma has been teaching for more than 22 years in India, Oman, and Bahrain, giving him a broad experience in teaching and interacting with students across multiple cultural and ethnic backgrounds. Prior to joining IIM Nagpur, Prof. Sharma worked with IIM Tiruchirappalli, Sultan Qaboos University, Oman and Birla Institute of Technology, International Center, Bahrain. His research interests include Blockchain, Artificial Intelligence, Social Media, Mobile Technologies, e-Services and IT for Disaster Management and has published 40 international journal articles with ABDC/ABS ranking.

Future of Data Science Innovation in Exploration

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> The market size of Data Science platforms is expected to reach 178 billion US Dollars by 2025. The US Bureau of Labour Statistics has stated that the jobs requiring Data Science skills will rise
>
> "

Source: Collegedunia

Programme Overview

In the disruptive digital age, AI and ML are emerging to produce a massive potential to automate business routines, enabling tomorrow's businesses to make smart decisions, understand the market better and effectively align market resources. Delve into new-age data science techniques and tools and upskill from India's top-ranked institute, IIM Nagpur's Post Graduate Certificate Programme in Data Science for Business Excellence and Innovation.

Embark on a learning path to identify relevant use cases catering to new-age AI/ML techniques. Master the alchemy of people, data science tools and innovative strategies to attain an edge over competitive advancement. Learn how to redefine appropriate analytical solutions, implement the prescribed solutions and imbibe the output for strategic and operational activities to transform organizations. Pedagogy builds a benchmark with an extensive blend of lectures, case-based discussions, hands-on training and much more.

Key Highlights

PG Certification & Alumni Status-IIM Nagpur

Case Study Based Learning

Personal Mentoring and Consultation from Faculty

Gain Exposure to New-Age Tools like AI/ML, Tableau, Python, and Google Analytics Tool

Chamber Consultation Sessions

Exposure to working on real-time business problems and solutions

Programme Objectives

1 To provide participants with an understanding of:

- Basic concepts and methods in machine learning, AI & Analytics consulting

- Popular algorithms for processing and analysing structured and unstructured data

- Data visualization tools and techniques

- Big Data Management

2 Help develop the ability to:

- Communicate effectively using data visualization and story-telling

- Conceptualize the application of analytics across various functions of organization

- Understand business problems to be solved using analytics

- Integrate standalone components of analytics solution into one unified solution

Learning Outcomes

Managerial understanding of the tools & techniques used in Data Science and Machine Learning

Skills to make data-driven, real-time, day-to-day organisational decisions

Understanding of the concepts of statistics to make strategic business decisions

Skills to implement machine learning algorithms

In-depth understanding of data structure and data analysis

DATA SCIENCE

ANALYSIS   STRUCTURE   ALGORITHM   PROCESS   PROGRAMMING   SOLVING   KNOWLEDGE

Programme content.

Data Visualization and Story-Telling

- Data Visualization using Tableau
- Story-telling using data

Modern Data Management and Cloud Technologies

- Big Data, Data lakes, and data pipelining
- Cloud Technologies for data analytics
- Ethical and Legal considerations related to data

Data Analytic Tools

- Tableau
- Python
- Google Analytics Tools

Business Statistics

- Probability
- Statistical Distributions
- Hypothesis Testing

Machine Learning Algorithms

- Cluster Analysis
- Association Rule Mining
- Recommendation Systems
- Regression and Decision Tree Models
- Artificial Neural Networks

Forecasting and other Statistical Methods

- Time-Series Analysis
- Logistic and Poisson regression
- ML Forecasting Models

Prescriptive Analytics

- Prescriptive Analytics
- Optimization
- Business Simulation

Deep Learning and Artificial Intelligence

- Natural Language Processing
- Chat bot
- Computer Vision | Image Analytics | Video Analytics
- Artificial Intelligence Use Cases

Social Media

- Social Media Tools
- Social Media Analytics

Analytics Consulting and Industry Overview

- Business consulting using analytics
- Contemporary analytics applications across the industry

Innovate and Transform using Data Analytics

- Digital Innovation
- Adoption of analytics applications
- Business process transformation

Capstone Project

Pedagogy

The programme curriculum will be a mix of lectures, case-based discussions and hands-on training

Each machine learning technique will be taught using a relevant business case. Participants will get exposure to working on various real-time business problems and their solution through Data Analytics

Hands on experience on tools such Microsoft Excel, Tableau, Python, etc. will be given to participants

Programme Details

Programme Duration	1 Year
Programme Schedule	Day: Sunday Timings: 10:00 AM to 01:00 PM
Mode of Delivery	Direct-to-Device (D2D)
Chamber Consulting Sessions	For Every Course
Campus Immersion	Campus visit* of 3 days at the end of the programme for project presentations and Valediction
Eligibility	Minimum 50% in Graduation from a recognized National or International University Minimum 2 years of work experience

*subject to prevailing Government rules pertaining to the pandemic

Fee Structure

Application Fee	INR 2,000/- (exclusive of GST)
Programme Fee	INR 2,40,000/- + 18% GST
Installment Pattern	
First Installment	INR 80,000/- + 18% GST
Second Installment	INR 80,000/- + 18% GST
Third Installment	INR 80,000/- + 18% GST

Specimen Certificate _____.

POST GRADUATE CERTIFICATE PROGRAMME IN

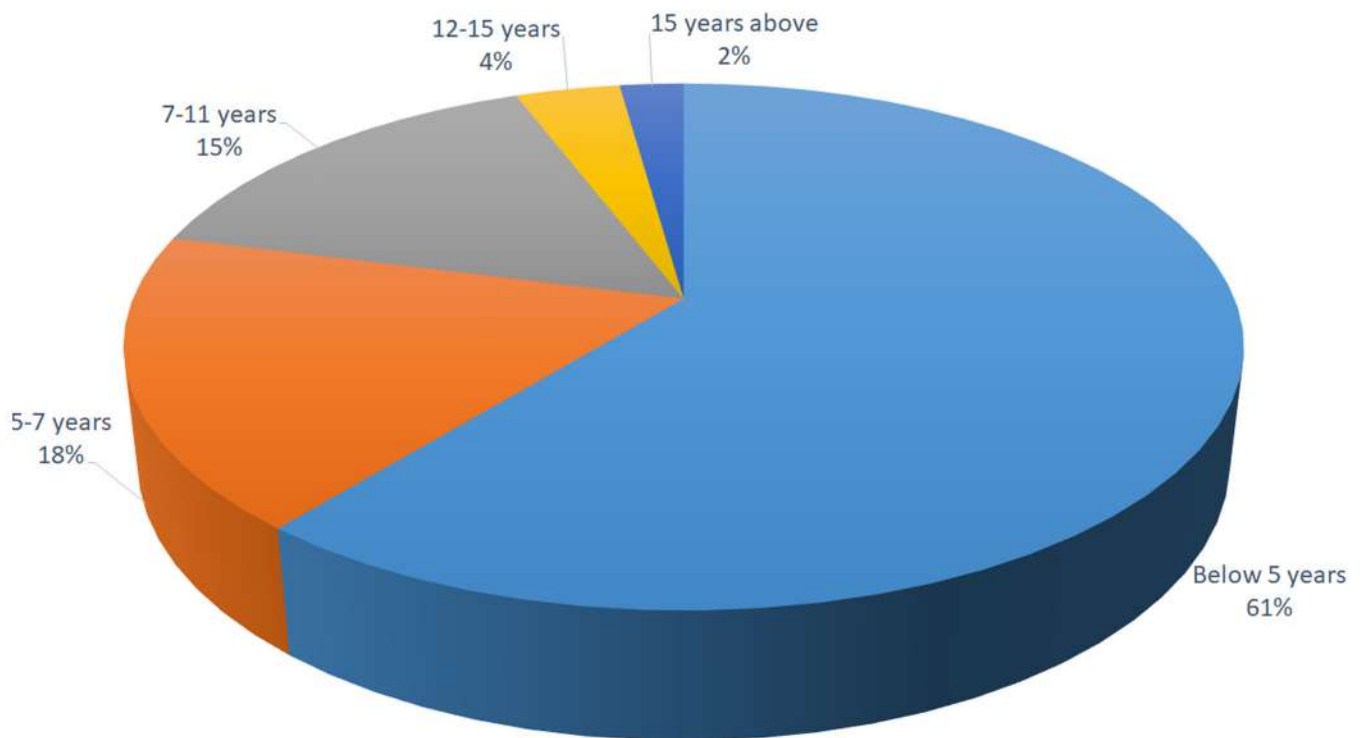# DATA SCIENCE FOR BUSINESS EXCELLENCE AND INNOVATION

for those who successfully complete the prescribed programme of Data Science and fulfill all the academic requirements.

Executive Education

[Roll No. 000000]

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Certificate of Completion

This is to certify that

Participant Name

has successfully completed the

Post Graduate Certificate Programme in
Data Science for Business Excellence and Innovation

held during   /   /   to   /   /

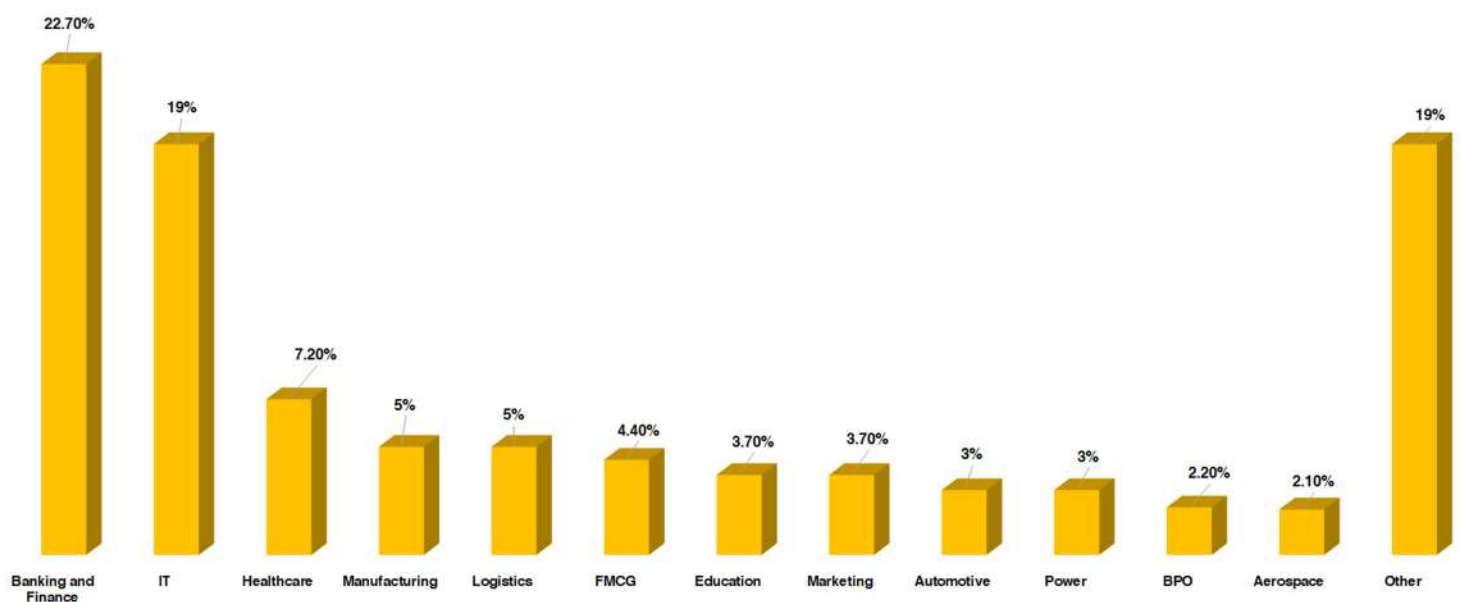| Programme Director | Programme Director | Chairperson, Executive Education | Director, IIM Nagpur |

Recent Batch Analysis

Work Experience

Work Experience pie chart:
- Below 5 years — 61%
- 5-7 years — 18%
- 7-11 years — 15%
- 12-15 years — 4%
- 15 years above — 2%

Industry Profile

Industry Profile bar chart:
- Banking and Finance — 22.70%
- IT — 19%
- Healthcare — 7.20%
- Manufacturing — 5%
- Logistics — 5%
- FMCG — 4.40%
- Education — 3.70%
- Marketing — 3.70%
- Automotive — 3%
- Power — 3%
- BPO — 2.20%
- Aerospace — 2.10%
- Other — 19%

Top Companies

accenture

J.P.Morgan

L&T

wipro

Capgemini

ICICI Bank

DHL LOGISTICS

Mondelēz International

Mahindra

BANK OF AMERICA

amazon

tcs TATA CONSULTANCY SERVICES

- Past performance records do not guarantee any future opportunities.

- All company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them.

Designation/Role of Previous Participants

- Director
- Associate Director
- Manager, India Operations & Technology
- Chief Manager
- Senior Director Media Operations
- Head - IT
- Deputy Branch Manager
- Senior General Manager (Corporate)

From Our Participant

The participant of the **Post Graduate Certificate Programme in Data Science for Business Excellence and Innovation – IIM Nagpur**, shares his experience:

Mr. Sumit Sharma

Senior Director,
Media Operations, GroupM

My experience with the program was excellent. We were provided up-to-date material for reference and well-briefed on every aspect of the course. Moreover, it captures all the aspects in line with future requirements, and we were provided proper guidance and support. The class size was more than 60 students and the average experience level was more than 12 years. This created a great opportunity to learn all-around. We not only had the IIM Nagpur faculty teaching this course, market experts and industry leaders also took us through their domains.

Looking back to the start of my career, I come from a digital background. Later, I switched my domain to the technical operations side of the business. My vision was to lean more towards the Data side of the business so that I can help my organization by delivering a better quality of work. As we live in a data-driven era, I chose to opt for this program and pursue this domain. It is sought-after as it leads to a tangible and measurable business outcome. The past 6 months have been phenomenal The time I have been investing has paid off, as I have gained learning in terms of tools, concepts, advancement in the world of data science, etc.

Overall, Jaro Education did a fantastic job in helping us understand how it becomes pretty easy when you have a facilitator or an organization whose vision is to drive knowledge to people as much as it can.

Click here to watch the full video

Career Assistance

Profile Building	Resume Review	Placement Assistance	Career Enhancement Sessions
Rigorously building the candidate's profiles and resume scrutinizing with their LinkedIn profiles. Jaro Education enables personalised feedback to boost overall virtual presence.	Moving forward with carefully curated resumes reviews that ensures you are interview-ready for the workplace of tomorrow.	Get career assistance as per the profile and preferences. On an average, get 5-6 job recommendations to enhance quality employment opportunities	Bridging connectivity to link the best talent with organizations through eminent sessions from top-class industry speakers.

- IIM Nagpur or Jaro Education do not guarantee or promise you a job or advancement in your existing position. Career Services is simply provided as a service to help you manage your career in a proactive manner. Jaro Education provides the career services described here. IIM Nagpur is not involved in any way with the career services described above and offers no commitments.

About Jaro Education

3,50,000+
Career Transformed

120+
Programs from Diverse Domains

30+
World's Leading Academic Partners

23+
Learning Centres across India

20+
Top NIRF Ranked Indian Institutes & Universities

10+
Top QS Ranked Global Institutes & Universities

Jaro Education is an edtech pioneer and online higher education company that specialises in executive education, serving as a liaison between the world's leading universities and institutes to create online and technology-driven programmes. The company provides a quality bucket of online executive education programmes catering to domains such as Doctorate & Ph.D., Analytics & Data Science, Management, Finance, etc., from renowned national and international institutions to meet the needs of working professionals. Our goal is to foster the growth of entrepreneurs and professionals at all levels, from entry-level to C-Suite, through world-class executive education programmes.

Jaro Education's Presence
Ahmedabad | Bangalore | Chennai | Delhi/NCR |
Hyderabad | Jaipur | Kolkata | Mumbai | Nagpur | Pune

Contact Us

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