



## IIM INDORE AND IIT INDORE JOINTLY OFFER

A TWO-YEAR DEGREE PROGRAMME

### MASTER OF SCIENCE IN DATA SCIENCE AND MANAGEMENT

(Blended Learning Mode)

ONLINE APPLICATION STARTS FROM APRIL 12, 2023 (WEDNESDAY)



## DIRECTORS' MESSAGE



### IIM INDORE

At IIM Indore, it is our constant endeavor to be a contextually relevant business school with world-class academic standards that help develop business leaders of the future and next generation of entrepreneurs. It gives me immense pride to introduce a joint programme of IIM Indore and IIT Indore a two-year master's programme in Data Science and Management.

This programme will position students to transform data into better business decisions, and help them identify areas of business where data science can add value and provide inputs to algorithm developers and data analysts. The programme will cover general concepts on algorithms, data structures, big data infrastructure, big data analytics life cycle, data security and management, and contemporary management thoughts including behavior elements.

It is my pleasure to welcome the participants for the joint programme of the two marquee Institutes.

**Prof. Himanshu Rai**



### IIT INDORE

Data science practitioners apply NLP and Machine learning to numbers, text, images, video, audio, and more to produce AI or Artificial Intelligence (AI) systems to perform tasks that ordinarily require human intelligence. The field is ever expanding as the importance of data and its interpretation is recognized across disciplines of research from the STEM fields to the Humanities, Social Sciences and Management. This joint programme between IIT Indore and IIM Indore harnesses the individual expertise of each institute to offer a holistic and comprehensive programme that will enhance the skill sets and the employability of the graduates. I wish the third batch of the MSDSM programme a success.

**Prof. Suhas Joshi**





## ABOUT IIM INDORE

With the objective of imparting high quality management education and training, the Department of Higher Education, Ministry of Education, Government of India established Indian Institute of Management Indore as one of the Institutions of Excellence. These Institutions are recognized as premier management institutions, comparable to the best in the world for teaching, research, and interaction with industries.

Established in 1996, Indian Institute of Management Indore (IIM Indore) has been a leader in the field of management education, interfacing with the industry, Government and PSUs. It is promoted and nurtured by the Ministry of Education, Government of India and is an institute of national importance under the Indian Institutes of Management Act, 2017.

IIM Indore has the latest in teaching aids, rich learning resources, a strong IT backbone, state-of-the-art sports complex and hostels as well as contemporary infrastructure.

### IIM INDORE RANKINGS:

- Ranked in Top 100 in FT Rankings 2023, 5<sup>th</sup> in India and 4<sup>th</sup> amongst the IIMs
- 26<sup>th</sup> Rank in the Global MBA QS Ranking in Asia - 2023, 4<sup>th</sup> amongst the IIMs

### MISSION

IIM Indore seeks to be a contextually relevant business school with world-class academic standards that develops socially-conscious managers, leaders and entrepreneurs. IIM Indore is committed to:

- Excellence in management education, research, and training.
- Use of contemporary participant-centric pedagogies and teaching methods.
- A presence in emerging segments of management education.





## ABOUT IIT INDORE

### MISSION

The 21<sup>st</sup> century heralded the age of knowledge societies. Indian Institute of Technology Indore, established in 2009, in the tradition of the IITs as a center for excellent education and training in IIT Indore aims to play an active role in this task of propelling India on her growth-trajectory by focusing on education, research and development. IIT Indore's motto *Vidya Sarvajana hitaya* reflects the mission of the institute- education for the benefit and reach of all.

### VISION

#### ACADEMICS:

- A vibrant academic community that develops programmes and research projects across disciplines.
- To facilitate extensive hands-on training by developing sophisticated instrumentation and experimental facilities and nurture creative scientific thinking.
- Adjunct faculty and distinguished international visiting faculty to form important components of the institute's teaching and research profile.

#### RESEARCH AND DEVELOPMENT:

- Promote interdisciplinary research in science, engineering, and humanities and social sciences.
- Conduct disruptive and social impacting research in some chosen areas such as sustainable development, climate change, food and water security.
- Promote industry-oriented research leading to new products, processes, and technologies.
- Promote culture of start-ups and entrepreneurship by establishing Industrial Research Park which will be a focal point in Central India.
- Aggressive patenting and protection of IPR.

#### INNOVATION AND ENTREPRENEURSHIP:

- "Concept to Product" to be facilitated with heavy engagement with industry partners.
- Promote undergraduate research, start-ups and incubators within the campus.





## PROGRAMME OVERVIEW

Business problems need to be jointly addressed by managers and data analysts. Decisions based on analytics need to be made by managers, which they can do only if they understand the data science tools and techniques. Generally, the programmes offered in this domain have focused more on some specific tools and techniques while the business context in which these tools have been applied have received less attention. Hence a comprehensive programme that focuses both on business knowledge and technical expertise is needed. Master of Science in Data Science and Management programme, jointly offered by IIT Indore and IIM Indore, will provide comprehensive knowledge to future data scientists. The programme will cover general concepts on algorithms, data structures, big data infrastructure, big data analytics life cycle, data security and management, contemporary management thoughts including behavioural elements.

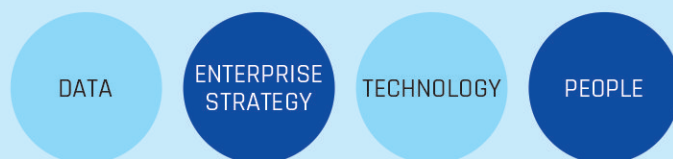
### HIGHLIGHTS OF THE PROGRAMME:

- Two-Year Master's degree programme.
- 14-15 hours per week live lectures online.
- Total 900 hours of learning.
- Benefit of academic proficiency of faculty from both the Institutes.
- 30 days on campus during the programme.
- Combination of foundational business knowledge, analytical expertise, and big-picture perspective.

### PEDAGOGY:

1. The teaching will be in blended mode with online classes and 15 days on-campus modules at each of the Institutes.
2. 14 to 15 hours per week live lectures  
Lecture online timing - 7:00-8:00 PM and 8:15-9:15 PM on weekdays (tentative).  
Lecture timing - 10:45 AM - 11:45 AM, 12:00 noon - 1:00 PM, 2:45 PM - 3:45 PM and 4:00 PM - 5:00 PM on Saturdays (tentative).
3. The mandatory in-person contact period is planned for one month during the programme.

### FOUR PILLARS OF THE PROGRAMME:



### LEARNING OUTCOMES

- The programme positions students to transform data into better business decisions.
- Students will be able to both identify areas of business where data science can add value and provide inputs to algorithm developers and data analysts.
- An effective cluster of foundational business knowledge, analytical expertise, and big picture perspective.
- The programme will help to translate data analysis into actionable insights & provide recommendations to create business impact.



## PROGRAMME CONTENTS:

The programme structure is divided into six trimesters from basic to advanced courses:

Trimester I to trimester IV of the programme will cover the following broad topics:

- Advanced Machine Learning
- Algorithms
- Business Analytics
- Business Research
- Data Structures
- Data Visualization
- Database Management System
- Design Thinking
- Ethics
- Financial Management
- Generating Business Value with Story Telling and Insights
- Human Resource Management
- Information Systems for Managers
- Introduction to AI
- Legal Aspects of Business
- Linear Optimization
- Machine Learning Foundations
- Managerial Communication
- Managerial Economics
- Marketing Management
- Mathematical and Statistical Methods for Data Science - 1
- Mathematical and Statistical Methods for Data Science - 2
- Operations Management
- Organizational Behaviour
- Probability and Statistics
- Programming Fundamentals for Data Science
- Research Methodology
- Spreadsheet Modeling
- Strategic Management
- Supply Chain Management
- Understanding Financial Statements and Functions of Finance

In the fourth and fifth trimester, participants will be offered a pool of electives to choose from the advanced courses offered by the two Institutes.

In the sixth trimester, participants will undertake a project under the guidance of faculty expertise from both the institutes.

## ELIGIBILITY

- First class (as defined by the awarding Institute/ University) or 60% or 6.0 CPI /6.0 CGPA (on a scale of 10) [relaxation for SC/ ST/ PwD category as per Government of India rule] degree in
  - BTech/ BE/ BS/ BPharm/ BArch/ Bdes/ BFTech/ Four years BSc/ MSc/ MCA/ MBA

### OR

- Equivalent with having done at least two courses in Mathematics and one in Computer Programming at qualifying degree level.

### AND

CAT/ GATE/ GMAT/ GRE/ JAM test score obtained anytime in the last three years.

### OR

- DMAT (Data-Science and Management Aptitude Test) will be online as well as in physical mode at IIT Indore on June 25, 2023.

The candidates who have appeared in any of the five standardized tests and are yet to receive the result can also apply, they must give the result by July 01, 2023.

The shortlisted candidates will be called for an interview. The final selection will be based on the performance in the interview.

## ADMISSIONS:

### INTAKE

- Up to 200 candidates will be considered for admission to the programme.  
(Reservation in admissions as per Government of India rules).

### HOW TO APPLY:

- Register on the website - <https://msjp.iiti.ac.in/>
- Complete the application form by paying the application fee of ₹1770/- (inc. GST) (for Indian applicants) or ₹2300/- (inc. GST) (for International applicants).
- The candidates who will be giving the DMAT (Data science and Management Aptitude Test) are required to pay the application fee as mentioned above with the additional examination fee ₹590/- (including GST).

### APPLICATION and PROGRAMME FEE DETAILS

APPLICATION FEE		
For Indian Applicants	For International Applicants (Including OCI/PIO/NRI)	Remarks
₹ 1,770/- (Including GST)	₹ 2,300/- (Including GST)	CAT/GATE/GMAT/GRE/JAM test score obtained anytime in the last three years.
₹ 2,360/- (Including GST)	₹ 2,890/- (Including GST)	Those who intend to appear in DMAT

PROGRAMME FEE		
For Indian Applicants	For International Applicants (Including OCI/PIO/NRI)	Remarks
₹ 12.0 Lakhs	₹ 15.6 Lakhs	The fee for the programme will be collected in three equal installments. (i) First installment will be collected at the start of the programme (for 1 <sup>st</sup> and 2 <sup>nd</sup> trimesters) (ii) Second installment will be collected before the commencement of the 3 <sup>rd</sup> trimester (for 3 <sup>rd</sup> and 4 <sup>th</sup> trimesters) (iii) Third installment will be collected before the commencement of the 5 <sup>th</sup> trimester (for 5 <sup>th</sup> and 6 <sup>th</sup> trimesters)

### IMPORTANT DATES

- Application starts from : April 12, 2023
- Deadline for the applications : June 15, 2023
- Registration will start from : August 7, 2023
- Online Classes will start from : August 9, 2023

For more queries contact:



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