M.SC. IN DATA SCIENCE

Department of Mathematics

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Indian Institute of Information Technology Lucknow

At a Glance

IIIT Lucknow is among 20 IIITs established under the Government's Public-Private Partnership (PPP) model, striving to become a premier center of excellence in Information Technology. With state-of-the-art academic and non-academic facilities, it aims to nurture talent and strengthen India's technological edge.

The M.Sc. in Data Science program is crafted to foster data storytelling skills and make students industry-ready.

Designed for individuals with a basic background in mathematics, it ensures accessible learning. The curriculum emphasizes hands-on experience, offering capstone projects after each semester to bridge theory and real-world applications.

contact

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https://iiitl.ac.in

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Eligibility and selection

J.A.M
JOINT ADMISSION TEST
FOR MASTERS

Bachelor's degree (B.A. /B.Sc. /B.Stat. /B.Math./B.Tech/B.E. or equivalent) with a background in Mathematics, Statistics, Computer Science or Physics. Those in the final year of their undergraduate program are also eligible to apply. Selection for the programme will be through Joint Admission Test for Masters (JAM). Students should have working knowledge of coding in any one programming language and atleast one subject of Computer programming Language- C/C++/JAVA/Python should have been passed with minimum 60% marks or completed a certificate course in any of the programming languages.

HOW TO APPLY

CCMN-2025 is a common platform for candidates to apply for M.Sc. programmes, based on their JAM score of year 2025, in NITs, IIITs and some GFTIs (for details, please refer to the list of participating Institutes on the CCMN website). This centralized system provides a common and convenient platform for online counselling wherein the candidates can fill in a single online application from their homes and apply to all programmes in all the participating institutions to which they are eligible.

CCMN
HTTPS://CCMN.ADMISSIONS.NIC.IN/

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COURSE STRUCTURE

I

First Semester

- Computational Thinking through Programming (4 credits)
- AI & ML with Python (4 credits)
- Mathematical Methods for Data Science and AIML (4 credits)
- Introduction to Probability and Statistics (4 credits)
- Professional Communication (3 credits)
- Yoga & Fitness (1 credits)

II

Second Semester

- Big Data Analysis (4 credits)
- Deep Learning (4 credits)
- Data Structures and Algorithms with Python (4 credits)
- Applied Statistics (4 credits)
- DBMS (4 credits)

III

Third Semester

- Data Mining and Warehousing (4 credits)
- Reinforcement Learning (4 credits)
- Elective-I (4 credits)
- Elective-II (4 credits)
- Data Science Capstone Project I: Project Preparation (4 credits)

IV

Fourth Semester

- Data Science Capstone Project II: Project Implementation (20 credits)

Pool of electives

Elective I

- Natural Language Processing
- Optimization Technique
- Stochastic Process

Elective II

- Business Analytics
- Cloud Computing
- Bayesian Data Analysis

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FEE STRUCTURE

	I	II	III	IV
total fees	71000	51500	53500	51500

SEAT MATRIX

OPEN	OPEN PWD	EWS	EWS PWD	ST	SC	OBC NCL	TOTAL
11	1	3	0	5	2	8	30

NEP 2020

Multiple Entry Multiple Exit

According to 11.5 of NEP 2020 (pp 37), we have implemented multiple entry and exit point for our M.Sc.
2023 batch onwards in the following manner:
Any student can leave the course after FIRST Year of M.Sc.; such students will be granted Post Graduate Diploma in Data Science.

Cooling Period

The student who wants to leave his/her study after FIRST year can leave, however to complete the M.Sc. Degree, (s)he has to come back and join the course directly in SECOND year within the BLOCK period of two years. (S)He will get at most four years to complete M.Sc. degree.

Multidisciplinary Education

According to 11.7 of NEP 2020 (pp 37), A course in Professional Communication and Sports have been included in the course structure.

Multi-Mode and Digital Education

According to The Point 24 of NEP 2020 (pp 58), The subjects which are running in online mode, will be evaluated through proctored online examination.

CLIMATE DATA ANALYTICS

Data science students can explore a specialization in Climate Data Analytics, a field that harnesses advanced data techniques to address environmental challenges. This specialized track equips them with the skills to analyze large-scale climate datasets, develop predictive models, and gain insights into patterns such as weather trends, carbon emissions, and climate change impacts.

In addition to gaining theoretical knowledge, students pursuing this path will have the exciting opportunity to intern at Climate Research Organization (CRO). These internships offer hands-on experience with real-world data, allowing students to contribute to meaningful projects focused on sustainability, environmental forecasting, and policy-making.

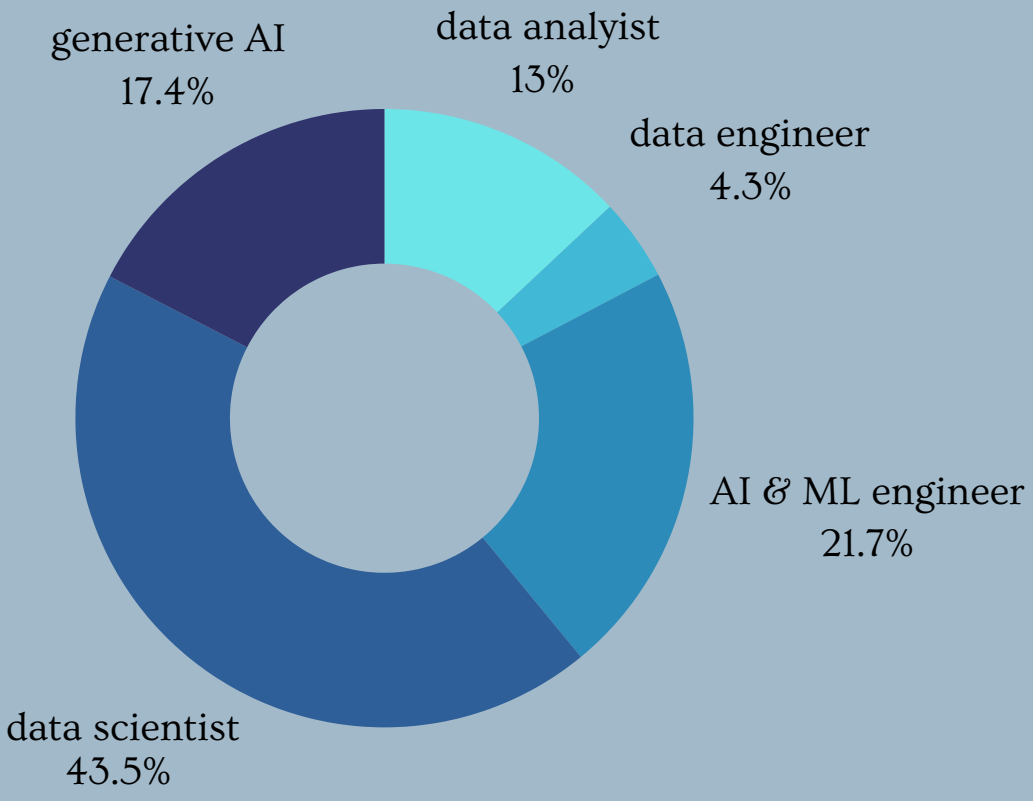
Through this exposure, they will work alongside experts, refine their technical competencies, and enhance their problem-solving abilities—preparing them to make impactful contributions in the growing field of climate science.

PLACEMENTS AND ACHIEVEMENTS

- Three students qualified for GATE 2024 in Data science and Artificial Intelligence.
- A group of students secured 35th rank in national-level hackathons.
- Many students obtained internships in various startups.
- Several students achieved Kaggle Expert ranks in different Kaggle competitions.

- 90% of the students are currently doing internships in leading companies in data analytics, data engineering and data scientist roles.

INTERN DEMOGRAPHICS



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