

INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

DATA SCIENCE PLACEMENT BROCHURE BATCH OF 2024 DEPARTMENT OF CSE-EEE-MA





ABOUT DATA SCIENCE

Data, often referred to as the "New Oil," possesses limited usefulness in its raw form. However, through refining and processing, it can transform into a tremendously valuable asset, capable of addressing a wide array of business problems. When combined with Machine Learning, with its extensive applications in Natural Language Processing (NLP), Speech, and Vision, a Data Scientist becomes an all-encompassing powerhouse within any team.

To cultivate such expertise, the Department of Computer Science, Mathematics, Electrical, and Electronics Engineering collaborated to offer a comprehensive coursework program complemented by a year-long Master's Thesis. This rigorous curriculum prepares students to tackle any challenge that arises in this dynamic industry.

The diversity of students in this course, hailing from various disciplines, fosters a unique and enriching learning environment within the classroom. Consequently, these students cultivate remarkable adaptability and rapid learning skills, which are highly sought-after in today's fast-paced world, where new technologies emerge incessantly.



WHY RECRUIT DATA SCIENCE?

M.Tech Data Science was started in the year 2019 with the main focus of inculcating a good knowledge of both theoritical and practical aspects of Data Science and Machine Learning with course subjects, projects, and labs fullfilling the latest requirement of research areas and making students well equipped with the necessary technical skills. Below are some of the reasons why recruiters should hire students from M.Tech Data Science?

1. The engineering graduates coming from diverse academic backgrounds with a mix of freshers and experienced professionals have been selected from **the National level GATE exam** and all of those who stood in the top percentile made it into this program.

2. Some important courses covered in the program include Linear Algebra, Optimization, Probability, and Statistics which have helped students master the mathematics of various Machine Learning algorithms and thus equipping them with a research mindset for solving real work problems backed by scientific rigor.

3. Students are highly competitive and quick learners, coming from an interdisciplinary background themselves, they understand real-world problems are not restricted to a single domain and thus offer an ability to quickly learn new skills and technologies on the job.

4. Unlike implementing ML algorithms from libraries students have been taught to implement these algorithms from scratch as a part of course assignments, not necessarily trying to reinvent the wheel but they have learned to approach machine learning from a perspective of math and programming instead of adopting a black-box approach and solving problem statements using open source libraries.

TESTIMONIAL

Recruiters,

First of all, I would like to thank you for opting Indian Institute of Technology, Guwahati as a potential campus for recruitment this year. I am pleased to write this testimonial on behalf of the postgraduating batch of our M.Tech in Data Science program. Data Science is a unique industry-standard program having basic and advanced machine learning courses which give a thorough background and understanding of the basics of domains like Image processing, NLP, Computer Vision, and Speech. The students of this batch have been selected from a rigorous entrance exam, and are among the cream of the engineering graduates of our country. I am sure that you will find our students most suitable for the current openings in your organization. But moreover, I believe that these graduates will exceed your expectations.





Dr. Ashish Anand

Professor Department of Computer Science and Engineering IIT Guwahati

COURSE STRUCTURE

This is a four semester long programme with course work of two semesters and other two are devoted to thesis research. Below are the core courses of Data Science and some of the elective courses students opted for as a part of their curriculum.

- Deep learning
- Computer Vision
- Speech Processing
- Information Retrieval
- Natural Language Processing
- Reinforcement Learning

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Core Courses

Elective Courses

Lab Courses

- Machine Learning
- Data Structures & Algorithms
- Statistical Foundations for Data Science
- Databases
- Matrix Computations
- Stochastic Models
- Optimization Techniques
- Scientific Computing

- Machine Learning Lab
- Data Structures & Databases Lab
- Python Programming Lab
- Data Visualization Lab
- R Programming Lab
- Numerical Computations Lab

ON GOING RESEARCH AREA

Here is a glimpse of the Master's Thesis Topics from our batch, spanning diverse cutting-edge research domains.

- \mathbf{O}^{1} MISINFORMATION DETECTION ON SOCIAL MEDIA
- **ADVERSARIAL NEURAL NETWORKS DEFENSE** 02 STRATEGY
- **VISUAL LIP READING** $\mathbf{03}$
- ARTIFICIAL INTELLIGENCE ENABLED E-COMMERCE $\mathbf{05}$
- **O**6 DISEASE DETECTION USING MACHINE LEARNING
 - AUTOMATIC IMAGE DESCRIPTION IN INDIAN LANGUAGE
- OPTIMIZED NETWORK FOR FACE RECOGNITION



Machine Learning

Deep Learning

Computer Vision

PLACEMENT STATISTICS

The M.Tech Data Science batch of 2022, landed profiles in almost all upcoming areas of the Technology Sector including **Software Development**, **Data Science**, **Machine Learning**, **Computer Vision** and **Natural Language Processing**. 14 students registered for placements and the percentage of students receiving placement was 100% making Data Science one of the most successful programs at IIT Guwahati. **The highest package of placement season 2022 from Data Science was 70 LPA**.

Here are some placement statistics.

12-15 LPA 15-20LPA 20-30 LPA 30-70 LPA

PLACED

CTC DISTRIBUTION

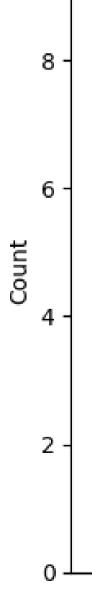
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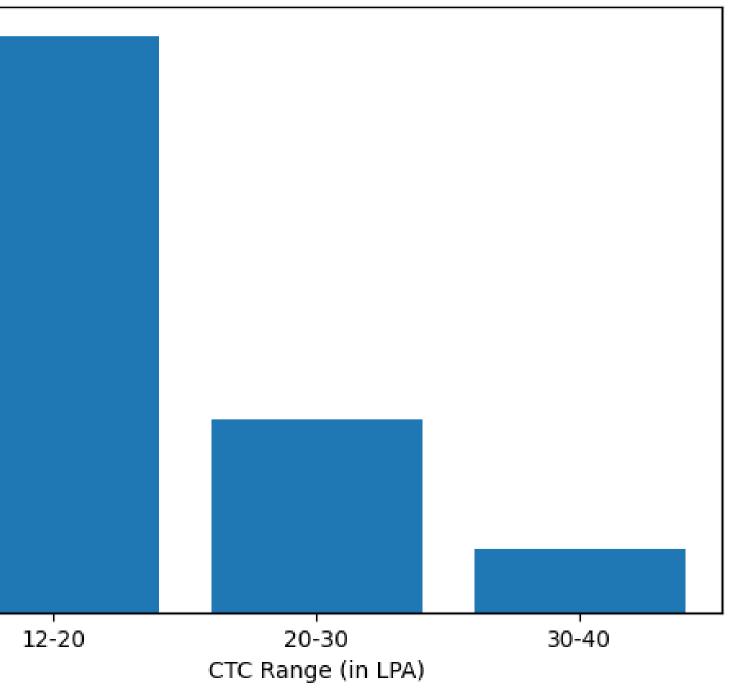
PLACEMENT STATISTICS

The graduating class of 2023 at our esteemed institution has showcased exceptional academic prowess and achieved remarkable placements in renowned companies spanning a wide array of sectors. The statistics of their outstanding accomplishments are truly noteworthy. The median salary for the previous batch stood at an 19.75 LPA, with the highest CTC of 31.5 LPA. Students have secured placements in diverse job profiles, further highlighting their versatility and adaptability in the professional landscape.





CTC Distribution Batch of 2023



Past Recruiters





ALUMINI INSIGHTS



Krishnavandan Padhye

> SDE Microsoft Batch of 2021

Joining the M.Tech Data Science program at IIT Guwahati was a transformative experience. The interdisciplinary approach, coupled with cutting-edge curriculum, provided me with a solid foundation in data science. The practical exposure and industry collaborations helped me secure a rewarding career in a top-tier company. I am grateful to the program for shaping my expertise and enabling me to make meaningful contributions in the field. The M.Tech Data Science program at IIT Guwahati opened up a world of opportunities for me. The comprehensive curriculum, expert faculty, and stateof-the-art infrastructure equipped me with the skills needed to excel in the data-driven industry. The hands-on projects and internships exposed me to realworld challenges, giving me the confidence to tackle complex problems. Today, I am thriving in my data science career, thanks to the strong foundation laid by this exceptional program.

Deep Ode

Data Scientist IBM Data Science Batch of 2022



CONTACT US

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Batch of Data Science 2022-2024 IIT GUWAHATI Invites you to join upcoming placement session. Thank You!