

BS Degree (4 Year)

in
Data Science and Applications
from
Indian Institute of Technology
Madras

The degree will be awarded by **Indian Institute of Technology Madras**.

The SEEP Program sponsors and supports student enrollments by providing assistance in the admission process and offering teaching support. Our goal is to increase student enrollment in Top-ranked institute, particularly in STEM education.

www.theseep.org

MAY 2025 CALENDAR

| For Qualifier Student | Start Date | End Date |
|---|------------------------|------------------------|
| Qualifier Registration Form | Open | Tuesday, May 20, 2025 |
| Course & Program Orientation | Monday, May 26, 2025 | Thursday, June 5, 2025 |
| Qualifier Exam | Sunday, July 13, 2025 | |
| Publishing Results for Qualifier Exam | Thursday July 17, 2025 | |
| QF Course Registration & Reattempt Qualifier Window | Thursday July 17, 2025 | Friday, July 18, 2025 |
| Reattempt Qualifier Exam | Sunday August 3, 2025 | |
| Publishing Results Qual_Reattempt | Wed, August 13, 2025 | |



Prof. V. Kamakoti
Director, IIT Madras

Message from Director

IIT Madras started this unique BS program to provide access to IIT quality education to the learners across the country. Data Science is a growing field and the demand for skilled resources in the market is very high. IIT Madras has a rich history of providing high-quality education and this program is designed to underline the fact that IIT is within the reach of everyone. This BS program is meticulously drafted and is aligned with the goals of the National Educational Policy.

We are planning to make IIT Madras a '**Vishwa-guru (Global Teacher)**' through innovative approaches to enhance the quality of education. In order to support the students from financially disadvantaged backgrounds to pursue this program, scholarships are being provided.

WHO CAN APPLY FOR ADMISSION?

- Anyone who has passed Class 12 or equivalent can apply irrespective of academic background. Those who qualify can join the program immediately.
- School students who have appeared for their Class 11 final exams can apply irrespective of their group/stream/board. Those who qualify can join the program after passing Class 12.

It is expected that the applicants have studied Mathematics and English in Class 10.

No additional eligibility other than the ones mentioned above is required to apply for the qualifier process or join the foundational level courses after clearing the qualifying exam.



APPLICATION PROCESS

Application for the batch starting May 2025 is currently closed. It will start soon.

Anyone who is eligible may start applying by filling in a simple application form and paying the application fee @ IIT Madras Portal.

| | |
|--|-----------------------|
| <i>General Category / OBC Applicant</i> | ₹3000 application fee |
| <i>SC / ST Category / PwD ($\geq 40\%$ disability) Applicant</i> | ₹1500 application fee |
| <i>SC / ST Category Applicant who is ALSO PwD ($\geq 40\%$ disability)</i> | ₹750 application fee |

ADMISSION PROCESS

1

Regular entry

Regular entry: All candidates, irrespective of their backgrounds, can earn admission by successfully completing the qualifier process.

Learners who were eligible to appear for the qualifier exam, but did not clear the qualifier exam or were absent for it, will be eligible to re-attempt the qualifier exam in the same term (refer important dates) without having to repeat the assignments. Fee for Re-attempting qualifier exam

Re-attempting (regular entry):

| | |
|---|----------------------|
| General Category / OBC Applicant | ₹1500 re-attempt fee |
| SC / ST Category / PwD ($\geq 40\%$ disability) Applicant | ₹750 re-attempt fee |
| SC / ST Category Applicant who is ALSO PwD ($\geq 40\%$ disability) | ₹375 re-attempt fee |

2

JEE-based entry:

JEE-based entry: Candidates eligible to appear for the most recent JEE Advanced are directly admitted.

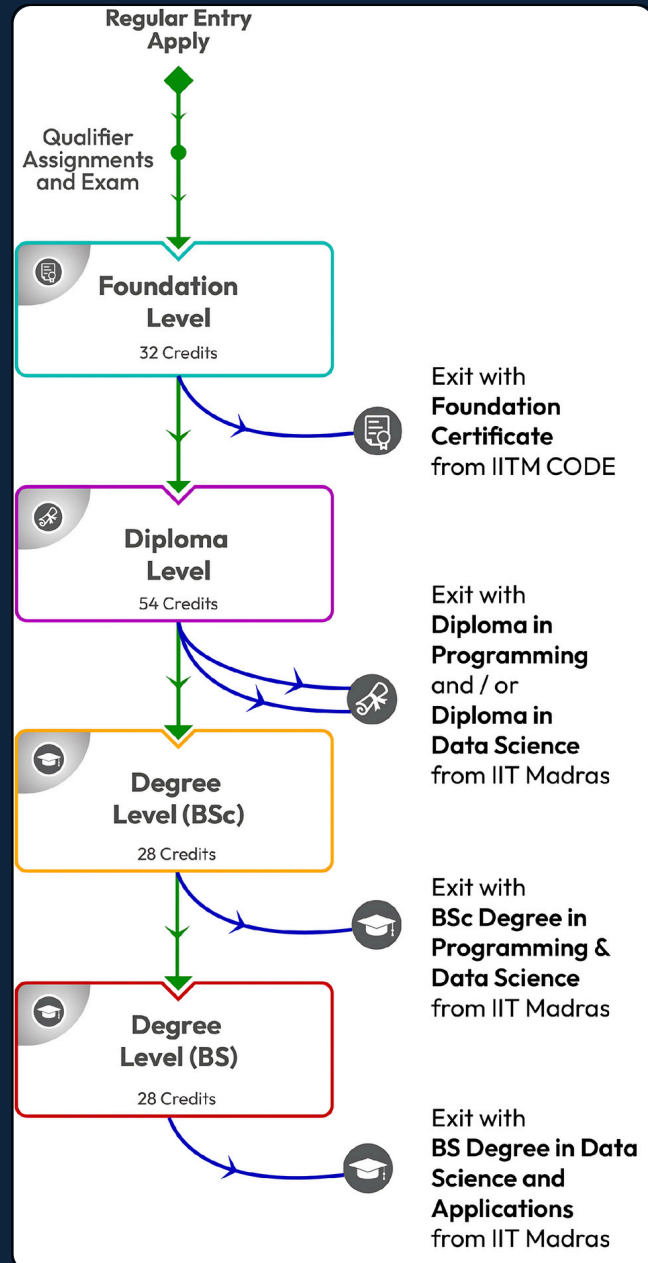


DEGREE STRUCTURE: OVERALL

There are four levels in the IIT Madras 4 Year BS Degree program and to get the BS Degree in Data Science and Applications from IIT Madras, a learner has to successfully complete all four levels.

There is also the flexibility to exit at any level. Depending on the courses completed and credits earned, the learner can receive:-

- A Foundation Certificate from IITM CODE (Centre for Outreach and Digital Education)
- Two Diploma(s) from IIT-M (1st Programming & 2nd Data Science)
- BSc Degree in Programming and Data Science from IIT Madras
- **BS Degree** in Data Science and Applications from IIT Madras.



Specializations

Data science; Machine Learning, Deep Learning, Reinforcement Learning, Computer Vision, LLMs, Big Data, Python, Java, PostgreSQL, Linux commands, C programming, Full Stack Application Development, Flask, Vue, NumPy, Scikit Learn, Pytorch, OpenCV, Kafka, Business Data Management, Business Analytics, Tools in Data Science, Financial Forensics, Market Research, Managerial Economics and many more relevant for Data Science applications.

MANDATORY REQUIREMENTS

Laptop/desktop device will be a key requirement to learn effectively from the course.

The following are the essential requirements that are recommended to pursue the BS Degree program from IIT Madras. Please note that there will be updates in some of the specifications with changes happening in technology.

Hardware

To enroll and study in the program, every student is required to have a laptop or desktop with the minimum configuration being as follows:

- **RAM Size** - 8 GB or higher (The ability to install more memory is desirable).
- **Processor** - Intel 8th Generation or AMD 4th Generation or upwards or its equivalent (The latest processor configuration is always recommended)
- **Storage** - Minimum of 500 GB, Desirable of 1 TB. Having an SSD storage is desirable.
- **Screen size and resolution** - Minimum of 13" for laptop and Minimum of 15" for desktop with 1080p
- Web-camera, a mic and speaker or an earphone/headphone with mic.

Learner should be able to travel to assigned exam centres for quizzes and exams, each term. Check the list of exam cities where our exam centres are currently located. Exam Centers in Rajasthan :- **Jaipur, Kota, Jodhpur and Udaipur.**



DEGREE FEE

The fraction of IIT Madras' fee support depends on the learner's category and family income and is given below:

| | Family Income > 5 LPA | | Family Income > 1 LPA and <= 5 LPA | | Family Income <= 1 LPA | |
|---------------|-----------------------------|---------------|------------------------------------|-------------------------|-----------------------------|-------------------------------------|
| | Fee Support from IIT Madras | Docs Required | Fee Support from IIT Madras | Docs Required | Fee Support from IIT Madras | Docs Required |
| General | N/A | NIL | 50% | EWS + Family Income | 75% | EWS + Family Income |
| OBC | N/A | NIL | 50% | OBC-NCL + Family Income | 75% | OBC-NCL + Family Income |
| SC / ST | 50% | SC / ST | 50% | SC / ST | 75% | SC / ST + Family Income |
| PwD | 50% | PwD | 50% | PwD | 75% | PwD + EWS / OBC-NCL + Family Income |
| SC / ST + PwD | 75% | SC / ST + PwD | 75% | SC / ST + PwD | 75% | SC / ST + PwD |

4 Year Fee Structure after IIT Madras Fee Support

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| Category (General/OBC-NLC) | 1st Year | 2nd Year | 3rd Year | 4th Year |
|---------------------------------|----------|----------|----------|------------|
| Family Income <= 1 LPA | 23,500/- | 15,750/- | 17,500/- | 31,000/- |
| Family Income >1 LPA & <= 5 LPA | 47,000/- | 31,500/- | 35,000/- | 62,000/- |
| Family Income > 5LPA | 94,000/- | 63,000/- | 70,000/- | 1,24,000/- |

| Category (SC/ST) | 1st Year | 2nd Year | 3rd Year | 4th Year |
|---------------------------------|----------|----------|----------|----------|
| Family Income <= 1 LPA | 23,500/- | 15,750/- | 17,500/- | 31,000/- |
| Family Income >1 LPA & <= 5 LPA | 47,000/- | 31,500/- | 35,000/- | 62,000/- |
| Family Income > 5LPA | 47,000/- | 31,500/- | 35,000/- | 62,000/- |

Note: The fee is completely waived for all female students with annual family income of less than Rs 5 lakh per annum (LPA) and male students with annual family income Rs 1 LPA (May 2024 Batch Sponsored By CSR Fund)

Note

First India Foundation is dedicated to women's empowerment, enhancing employability, democratizing access to premier institutions, implementing NEP 2020, and providing career guidance and student welfare. As part of this mission, we facilitate student enrollment in IIT Madras programs through social or government support. Our organization has no commercial interests in this initiative. (Source of content: IIT Madras Portal)

"IIT-मद्रास, नाम ही विश्वास और प्रतिष्ठा की पहचान है।"

NIRF 2024 Rank - 1

20,000+

Students doing this program along with another degree

3000+

Working Professionals studying in the program

850+

Secured Admission to Masters/PhD programs within and outside India

20+

BS students in Top 100 Ranks of GATE Exam 2024

Decision-making is increasingly becoming data-driven in organizations. This involves analyzing large volumes of data to identify patterns and build models. This requires a combination of skills ranging from computing, statistics, and mathematics and is broadly called data science. There is a huge gap between the demand for data scientists and the supply of suitably qualified applicants in the job market. The BS programme in Data Science and Applications aims to create thoroughly trained professionals with expertise in **programming, application development, data sciences, and machine learning**. Candidates from any stream can apply for this programme and join.

"Join the Dream, Shape the Future & Be a Proud Alumnus of IIT Madras"



Degree /Diploma Distribution Ceremony May-23

**IIT
Madras**