



BS Degree (4 Year)

in

Electronic Systems

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	



Director's Message

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. The BS program is meticulously drafted and is aligned with the goals of the National Educational Policy. With the growing prominence of electronics in the current world scenario, education of electronics fundamentals at scale becomes crucial both for research & development and capacity building to meet the industry demand. Keeping this in mind, IIT Madras offers this BS course which we expect to help meet the need of our nation and aspirations of the student. 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 with Physics and Mathematics can apply.
- School students who have appeared for their Class 11 final exams can apply. Those who qualify can join the program after passing Class 12.
- The committee approved that students who have passed Maths and Physics separately through NIOS or any other equivalent organization be permitted to apply to the BS in Electronic Systems program, having fulfilled the minimum eligibility requirement.

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.

Category of applicant	Application fee
General Category / OBC / EWS Applicant	₹6000 application fee
SC / ST / PwD ($\geq 40\%$ disability) Applicant	₹3000 application fee
SC / ST Applicant who is ALSO PwD ($\geq 40\%$ disability)	₹1500 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-NCL / EWS Applicant	₹2000 re-attempt fee
SC / ST Category / PwD ($\geq 40\%$ disability) Applicant	₹1000 re-attempt fee
SC / ST Category Applicant who is ALSO PwD ($\geq 40\%$ disability)	₹500 re-attempt fee

2

JEE-based entry:

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

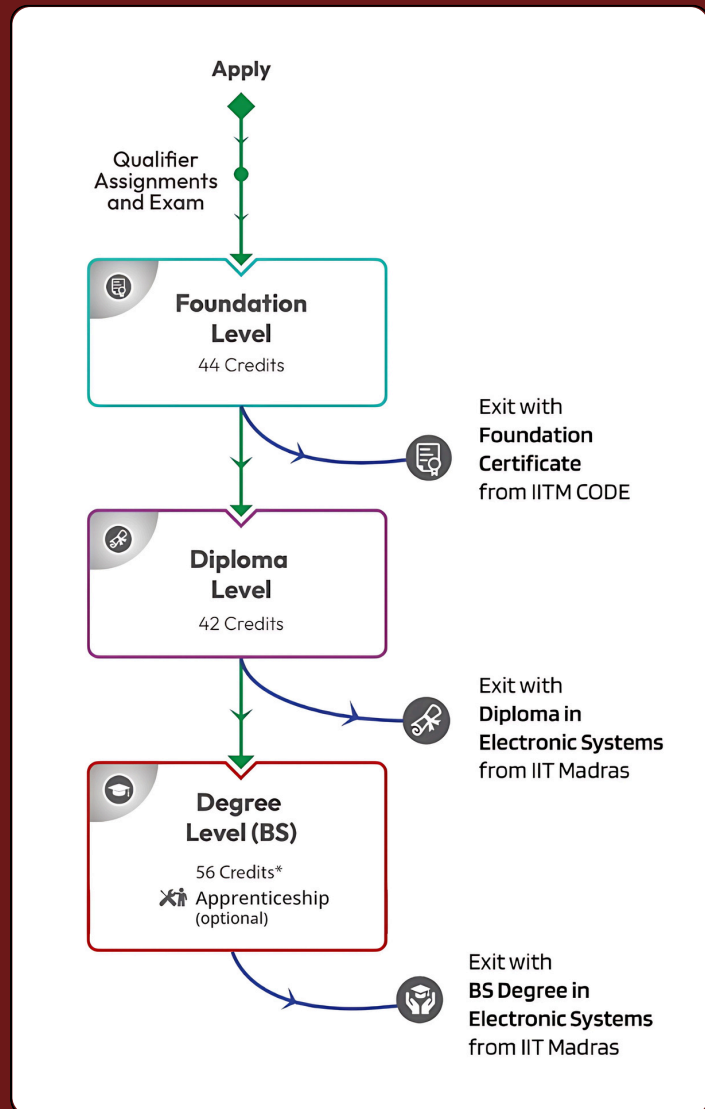


DEGREE STRUCTURE:

The program comprises three levels and a learner has to successfully complete all three levels to get the BS Degree from IIT Madras.

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

1. A Foundation Certificate from IITM CODE (Centre for Outreach and Digital Education)
2. Diploma from IIT Madras
3. BS Degree in Electronic Systems from IIT Madras.



Lab Exercises:

Some of the courses of the programme are accompanied by lab sessions. The lab sessions will be conducted at IIT Madras Campus every semester. Some lab sessions may be done online or can be handled through kits that will be suggested and can be purchased by students.

Specializations

- Embedded Systems – Microcontrollers, IoT, real-time processing
- VLSI Design – Chip design, semiconductor technology
- Signal Processing – Image, audio, and video processing
- Power Electronics – Electric vehicles, renewable energy systems
- Communication Systems – Wireless networks, 5G, optical fiber
- Control Systems – Automation, robotics, industrial 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

(As latested updated by IITM, Tentative, to be finalised)

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

Category of student	Institution fee advance
SC or ST or PwD with >40% disability certificate	50%
EWS or OBC-NCL category with annual family income between 1-5 LPA	50%
SC or ST and PwD with >40% disability certificate	75%
SC or ST or PwD with >40% disability certificate or EWS or OBC-NCL category AND annual family income less than 1 LPA	75%

4 Year Fee Structure after IIT Madras Fee Support

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Category (General/OBC-NCL)	1st Year	2nd Year	3rd Year	4th Year
Family Income \leq 1 LPA	20,000/-	42,000/-	42,000/-	42,000/-
Family Income >1 LPA & \leq 5 LPA	40,000/-	84,000/-	84,000/-	84,000/-
Family Income > 5 LPA	80,000/-	Rs. 1,68,000	Rs. 1,68,000	Rs. 1,68,000

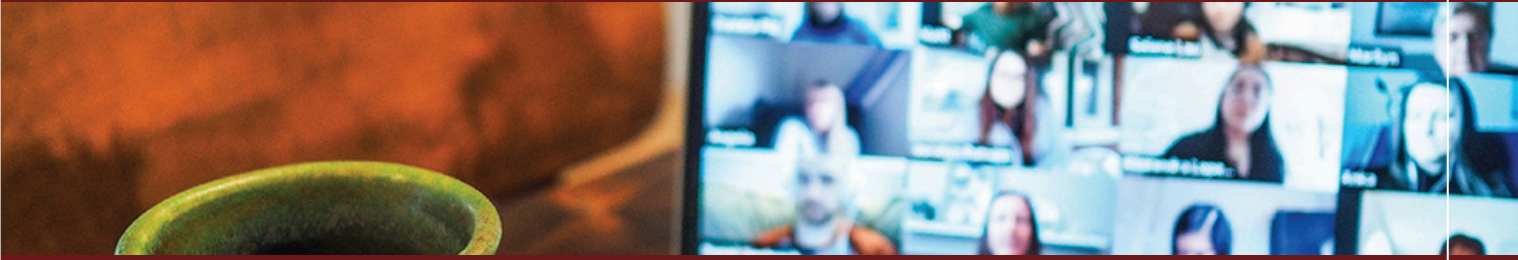
Category (SC/ST)	1st Year	2nd Year	3rd Year	4th Year
Family Income \leq 1 LPA	20,000/-	42,000/-	42,000/-	42,000/-
Family Income >1 LPA & \leq 5 LPA	40,000/-	84,000/-	84,000/-	84,000/-
Family Income > 5 LPA	40,000/-	84,000/-	84,000/-	84,000/-

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



Electronic systems are at the heart of almost all modern engineering systems. By acquiring the fundamentals and skills, one will be in a position to serve the Automotive, Consumer Electronics, Space, Mobile, Medical Electronics, and Defense industries as an electronic or embedded system design and development engineer. There is a huge growing demand in this domain. The BS degree in Electronic Systems has been started with the growing demand for skilled graduates in the electronics and embedded manufacturing sector in India in mind.

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



TN State CM with 'Electronics Kit' Built By IITM

**IIT
Madras**