IIT MADRAS

2023
BS (Medical Sciences and Engineering)

Department of Medical Sciences and Technology

INFORMATION BROCHURE

Admission to
BS Medical Sciences and Engineering

Information Brochure

Department of Medical Sciences and Technology
Indian Institute of Technology Madras

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<h1 align="center">Part-I Institute</h1>

1. Indian Institute of Technology Madras

Indian Institute of Technology Madras is an institute of national importance established through an Act of Parliament for fostering excellence in education.

IIT Madras is one among the foremost institutes of national importance in higher technological education, basic and applied research. The Institute has sixteen academic departments and several advanced research centres in various disciplines of engineering and pure sciences. A faculty of international repute, a brilliant student community, excellent technical & supporting staff and an effective administration have all contributed to the pre-eminent status of IIT Madras. The campus is located in the city of Chennai, previously known as Madras. Chennai is the state capital of Tamil Nadu, a southern state in India.

IIT Madras have been ranked number one engineering Institute for the past 6 years and we have been ranked number one overall for the past 2 years by National Institutional Ranking Framework (NIRF).

Our Vision: To be an academic institution in dynamic equilibrium with its social ecological and economic environment striving continuously for excellence in education, research and technological service to the nation.

2. About the Department of Medical Sciences and Technology

The Department of Medical Sciences and Technology at the Indian Institute of Technology Madras was established in February 2023. The Department aims to set up a world-class research environment for Medical Sciences and Technology in order to develop and train Engineering Physiologists of the future.

By applying engineering principles to medical knowledge, this new breed of professionals who transcend medicine and engineering have the potential to revolutionize healthcare delivery both in hospital settings and outside. With a combination of the principles of design, bio-mechanics, electronics technology and the science of ergonomics, powerful medical devices can be developed that enhance the efficacy, safety, and reliability of medical treatments.

3. Academic Program

The BS Program in Medical Sciences & Engineering is a game-changing interdisciplinary program that bridges Medicine & Engineering.

The courses in the program will be taught by both medical & engineering faculty, and will provide a strong research base for students. The course structure involves an internship in a hospital to tie theory and practice.

In this program, specialization is possible in one or more of the following areas:
- Organ-specific Device Development
- Artificial Intelligence applied to Health
- Medical Image Analysis

- Quantitative Pharmacology
- Drug Design and Deployment
- Translational Research in Medicine and Regulatory Processes
- Fundamental Physiological Sciences

IIT Madras offers admission into the four year undergraduate program B.S. in Medical Sciences & Engineering leading to a Bachelors degree upon successful completion of the course curriculum requirements. The program is credit-based and thus offers the flexibility to progress at one's own pace. A minimum level of performance is essential for satisfactory progress. The medium of instruction is English.

All candidates who satisfy the eligibility criteria can appear for the IISER Aptitude Test (IAT) 2023. The successful candidates meeting the Class XII (or equivalent) performance criterion are eligible for admission into IIT Madras, for the BS in Medical Sciences and Engineering program. While allotting seats, policies as per Government of India rules will be followed, depending on candidates' merit, category, and/or nationality.

4. **Reservation of seats**

   Indian nationals belonging to certain categories are admitted under the seats reserved for them in accordance with the rules prescribed by the Government of India. The categories and the extent of reservation are as follows:

   - Scheduled Caste (SC) – 15% of seats
   - Scheduled Tribe (ST) – 7.5% of seats

- Other Backward Classes belonging to the Non-Creamy Layer (OBC-NCL) – 27% of seats
- Economically Weaker Section (EWS) — up to 10% (as per Government of India rules)

- Persons with Disability (PwD) with at least 40% impairment – PwD reservations @ 5% will be followed as per GoI norms.

Candidates must note that the benefit of reservation will be given to them subject to verification of documents. If it is discovered at any stage that a candidate has used a false / fake / incorrect document, or has furnished false, incorrect or incomplete information, in order to avail the benefit of reservation, then such a candidate shall be excluded from all admission processes. In case such a candidate has already been given admission, the admission shall stand cancelled.

5. **OCI/PIO Candidates**

As per the decision dated February 03, 2023 passed by the Hon'ble Supreme Court of India in Writ Petition (Civil) 891 / 20213, the OCI/PIO candidates shall be considered as Indian nationals.

At the time of seat allocation, the OCI/PIO candidates shall be considered for the seats in the OPEN category. The OCI/PIO candidates shall be included in the Common Rank List, and/or CRL-PwD list as applicable, subject to qualifying the IAT 2023. The OCI/PIO candidates are not entitled to the benefit of reservation under the GEN-EWS, OBC (NCL), SC or ST categories for the allocation of seats.

Part-II: Admission

1. Eligibility Criteria

All the candidates **must simultaneously fulfil each and every one of the following three criteria** to apply for BS Medical Sciences and Engineering.

i) Criterion 1 – Qualified in IAT 2023

Applicants must be Indian nationals or PIO or OCI card holder in order to apply through IAT – 2023 channel.

ii) Criterion 2 – Age limit
Candidates should have been born on or after October 1, 1998. Five years age relaxation is given to SC, ST, and PwD candidates, i.e. these candidates should have been born on or after October 1, 1993.

iii) Criterion 3 – Appearance and performance in Class XII examination:
- Candidates must have passed Class XII (or equivalent) exam with science stream in 2022 or 2023 from any board recognized by Council of Boards of School Education in India COBSE.
- Candidates must have taken Mathematics as a subject and at least two subjects among Biology, Chemistry, and Physics during their Class XII (or equivalent) exam.
- Candidates belonging to SC/ST/PWD should have scored a minimum of 55% marks in aggregate or equivalent grade in their Class XII (or equivalent) exam. Candidates belonging to other categories should have scored a minimum of 60% marks in aggregate or equivalent grade in their Class XII (or equivalent) exam.
- Candidates whose Class XII (or equivalent) exam results are not yet declared, can apply for admission to the B.S. program in Medical Sciences and Engineering at Indian Institute of

Technology (IIT) Madras. However, their admission will be provisional and confirmed subject to fulfilling the minimum eligibility criteria given above.

- For candidates who had appeared in the Class XII (or equivalent) exam for the first time in 2022 and reappeared in any subject (for whatsoever reason) in 2023, the better of two performances will be considered.
- If a board gives aggregate marks considering both Class XI and Class XII, then only Class XII (or equivalent) exam marks will be considered. If a board gives aggregate marks considering the results of all three years of a 3-year diploma or courses of equivalent duration, then only the marks scored in the final year will be considered. Similarly, for boards which follow a semester system, the marks scored in the final two semesters will be considered.
- If a board awards only letter grades without providing an equivalent percentage of marks on the grade-sheet, the candidate should obtain a certificate from the board specifying the equivalent marks and submit it before the deadline of the mark-sheet submission. In case such a certificate is not provided by the board, the percentage marks will be assessed as follows: Percentage marks = (CGPA or CPI obtained × 100) / PS, where PS stands for the maximum value of the point scale used by the respective board.

2. Examination considered as equivalent to Class XII

- The final examination of the 10+2 system, conducted by a Central or State Board recognized by the Association of Indian Universities (AIU).
- Intermediate or two-year Pre-University examination conducted by a Board or University recognized by the Association of Indian Universities.
- Final examination of the two-year course of the Joint Services Wing of the National Defence Academy.

- Senior Secondary School Examination conducted by the National Institute of Open Schooling with a minimum of five subjects.
- Any Public School, Board or University examination in India or in a foreign country recognized as equivalent to the 10+2 system by the AIU.
- H.S.C. vocational examination. A Diploma recognized by the All India Council for Technical Education (AICTE) or a State Board of Technical Education of at least 3 years duration.
- General Certificate Education (GCE) examination (London, Cambridge or Sri Lanka) at the Advanced (A) level.
- High School Certificate Examination of the Cambridge University or International Baccalaureate Diploma of the International Baccalaureate Office, Geneva.
- Candidates who have completed Class XII (or equivalent) examination outside India or from a Board not specified above should produce a certificate from the AIU to the effect that the examination they have passed is equivalent to the Class XII examination.
- In case the Class XII examination is not a public examination, the candidate must have passed at least one public (Board or Pre-University) examination earlier.

3. Admission Process

The number of rounds of offers will be 4, or seats getting filled or one week before commencement of classes, whichever is earlier.

The following is the seat distribution.

i) Seat Matrix:

Open	GEN-EWS	OBC-NCL	SC	ST	Total
12	3	8	5	2	30

Note: PwD reservations @ 5% will be followed as per GoI norms

ii) Application for BS Program

    Applications for this program are accepted through the online portal only. ([click here](#))

    Application processing fee: Rs.500 for GEN/OBC-NCL, EWS; Rs. 250 for SC/ST/PWD/Women candidates.

iii) Admission offer

- Admission offer to any candidate will be given strictly based on the following factors:
  - seat availability at IIT Madras, for the BS program at the Department of Medical Sciences and Technology (MST) in the current allocation round,
  - IAT rank obtained by the candidate,
  - the category to which the candidate belongs.
- Candidates can check if they received the admission offer by logging into the application portal.
- If a candidate receives an admission offer, he/she can either choose to accept the seat OR reject it at particular round. If candidate rejects the offered seat or if no action is taken by the candidate before the deadline, then candidate will not be able to participate in further rounds of counselling.
- If a candidate receives an offer, then to accept the seat offered, the student must pay a seat acceptance fee through online mode before the prescribed deadline. If the seat acceptance fee is not paid, the candidate will not be considered for admission in subsequent allocation rounds.
- Admission offers given are provisional. They will be confirmed only after the candidates report at IIT Madras where they have secured admission and provide all the required documents in original.
- Requests for extension of date or time for seat acceptance will not be entertained under any circumstances. Published deadlines will be strictly followed.

All the announcements related to the admission process will appear on the website ([click here](#)). Candidates must follow this website for any updates.

4. Fees

Application Fee

- Rs.500/- for candidates applying under General, EWS, and OBC-NCL categories.
- Rs.250/- for candidates applying under persons with disabilities and SC/ST category.
- Application fee is non-refundable

Seat Acceptance Fee (SAF)

- Seat Acceptance Fee is to be paid only after an offer of admission has been made to the candidate.

- SAF is Rs. 35,000/- (Rs.30,000/- + Rs. 5000/- (Non refundable administrative fee)) for General/EWS/OBC-NCL categories

- SAF is Rs.17,500/- (Rs.15,000/- + Rs. 2500/- (Non refundable administrative fee)) for SC/ST categories.

- Failure to deposit the SAF within the stipulated time will result in the cancellation of the offer. Furthermore, the candidate will not be considered in any subsequent rounds of seat allotment. Any communication received in this regard will not be entertained.

- Once the candidate registers in IIT Madras, this amount will be adjusted against the first semester fee.

Tuition and Hostel Fee:

The fee structure is equal to the B. Tech. fee structure of the institute. Details of the fee for the B. Tech. program can be found in this [link](#).

5. Withdrawal Process

- The application fee is not refundable.
- Refund policy for the Seat Acceptance Fee is given below :
    1. The candidate can withdraw his/her seat/offer by pressing the button *"WITHDRAW OFFER"* in the application portal. No other form/method of withdrawal is accepted.
    Email or phone communication in this regard is not entertained.
    2. Once candidate has withdrawn, he/she will not be considered for further rounds of admission process. A withdrawn candidate cannot re-enter the admission process again under any circumstances.
    3. There are two important withdrawal dates :
        - Round-wise withdrawal (RW) date, and
        - Final withdrawal (FW) date.

    RW and FW dates will be announced in the admission website.

    4. If a candidate withdraws from the admission process before RW deadline, then no cancellation fee will be applicable.
    5. If a candidate withdraws after the RW deadline, but on or before FW, then the non-refundable amount will be deducted.
    6. IIT Madras, or IISERs and Joint Admission Committee (JAC) are not liable for losses incurred if the candidate's application is not withdrawn in the above manner and on or before the stipulated date and time.
    7. Once a candidate has withdrawn the offer through the admission portal, the amount due will be returned through the same channel (credit/debit card, bank account etc.) used for paying the seat acceptance fee (SAF). Such candidates do not have to take any additional steps towards their SAF refund. Refund process will start only

after three weeks of the completion of the admission process.

8. If the candidate does not withdraw on or before FW deadline, then the SAF will be transferred to IITM. Any further withdrawal will be taken care by IITM following the instructions given below.

9. If the candidate fails to join in-person at IITM on the joining date mentioned in the offer letter of IITM, the cancellation fee decided by IITM will be applicable.

10. Further, candidates who have paid SAF but fail to show up by the last date of "admission fee payment" at IITM will not be considered for further rounds of admission.

11. If the candidate decides to discontinue after joining IITM, the refund policy of IITM will be applicable as given below.

Refund rules:

Students withdrawing before the last round of allotment	Full fee to be refunded
Students withdrawing before the commencement of classes	Amount paid minus Rs. 5000 as processing charges to be refunded
Students withdrawing after the commencement of classes	No refund

6. Important dates

Registration and submission deadlines.

Event	Date/time
Opening of the registration for BS program	May 15 (6.30 pm)
Closing of the registration for BS program	June 30, 2023 (5 pm)
First round of admission offers	July 10, 2023 (10 am)
Online reporting: fee payment /document upload/ response by candidate to query (if required in round 1)	July 13, 2023 (5 pm)
Second round of admission offers	July 14, 2023 (10 am)
Online reporting: fee payment /document upload/ response by candidate to query (if required in round 2)	July 17, 2023 (5 pm)
Third round of admission offers	July 18, 2023 (10 am)
Online reporting: fee payment /document upload/ response by candidate to query (if required in round 3)	July 21, 2023 (5 pm)
Fourth round of admission/Spot admission	July 22, 2023 (10 am)
Online reporting: fee payment /document upload/ response by candidate to query (if required in round 4)	July 22, 2023 (5 pm)
Joining date at IIT Madras	July 25, 2023 (as per the institute calendar)
Commencement of Classes	July 31, 2023