M.Tech. Admissions Brochure

July 2020 Session

Department of Computer Science and Engineering

Indian Institute of Technology Hyderabad

भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

M.Tech. Admission Details

GENERAL INFORMATION

The CSE department at IIT Hyderabad invites outstanding candidates to join us for the Master of Technology (M.Tech.) programme. The M.Tech. programme at IIT-H provides ample opportunities for students to explore both research and development skills. The advanced and specialized courses provide deeper insights into various subjects in Computer Science and Engineering, while the M.Tech. thesis allows you to go deeper into a topic of your interest by joining exciting research projects of the young faculty in the department. An M.Tech. at CSE-IITH will prepare you both for sought-after industry jobs, or for a Ph.D. in Computer Science and Engineering. IIT-H has its vision firmly entrenched in being a cradle for invention and innovation, and has already established partnerships with international partners, especially in Japan, since its inception in 2008. The CSE Department at IIT-H is active in research areas including theoretical computer science, algorithms, graph theory, networking, distributed systems, compilers, big data analytics, data mining, machine learning, and image/video processing. It has large active funded research projects in the application domains of cyber-physical systems, converged cloud radio access networks, and data analytics. While the standard M.Tech. programme spans 2 years, the 3-year M.Tech. programme is research-focused and allows students to work on sponsored research projects, thus focusing on research every semester, along with the coursework.

The intake for 2-year M.Tech. happens only once a year (for the July session), while the intake for the 3-year M.Tech. and the Sponsored M.Tech. typically happens twice a year (for the July and January sessions). Starting 2020, the CSE department is launching a new M.Tech. programme in Networks and Information Security keeping in mind the national interest and demand in this area. The programme will provide advanced training in research and development in the theoretical and practical aspects of networks and information security.

The CSE department does not offer a part-time M.Tech. programme. Admission to the M. Tech. programme is solicited in the following categories for the July 2020 session:

- MT-CS-TA: 2-year M.Tech. in Computer Science with Teaching Assistantship (TA)
- MT-CS-RA: 3-year M.Tech. in Computer Science with Research/Project Assistantship (RA)
- MT-NIS-TA: 2-year M.Tech. in Networks and Information Security with Teaching Assistantship (TA)
- MT-CS-ES: Employer-Sponsored M.Tech. (2-year/3-year) in Computer Science, where the candidate's employer sponsors the expenses for the program
- MT-CS-SS: 2-year M.Tech. in Computer Science, Self-Sponsored
- MT-DS-SS: Self-Sponsored M.Tech. in Data Science (MDS) **for working professionals**, with a flexible duration of 3-5 years

Eligibility Criteria:

MT-CS-TA: 2-year M.Tech. in Computer Science with Teaching Assistantship (TA)

And

MT-CS-RA: 3-year M.Tech. In Computer Science with Research/Project Assistantship (RA):

- A 4-year B.Tech./B.E. degree in any engineering discipline or an MSc/MS/MCA degree in CS/IT/Maths, and have an excellent academic record. Candidates having professional qualifications recognized by AICTE, like AMIE, are also eligible to apply, **AND**
- The candidate should have demonstrated adequate background in computer science (Valid GATE score in CS/IT).

MT-CS-ES: Employer-Sponsored M.Tech. (2-year/3-year), where the candidate's employer sponsors the expenses for the program:

- A 4-year B.Tech./B.E. degree in any engineering discipline or an MSc/MS/MCA degree in CS/IT/Maths, and have an excellent academic record. Candidates having professional qualifications recognized by AICTE, like AMIE, are also eligible to apply, **AND**
- A sponsorship letter from the employer needs to be produced at the time of the interview

MT-NIS-TA: 2-year M.Tech. in Networks and Information Security with Teaching Assistantship (TA):

- A 4-year B.Tech./B.E. degree in any engineering discipline or an MSc/MS/MCA degree in ECE/Statistics/CS/IT/Maths, and have an excellent academic record. Candidates having professional qualifications recognized by AICTE, like AMIE, are also eligible to apply, **AND**
- The candidate should have a valid GATE score in CS/IT/ECE/Statistics/Maths

MT-CS-SS: 2-year Self-Sponsored M.Tech. in Computer Science:

- A 4-year B.Tech./B.E. degree in any engineering discipline or an MSc/MS/MCA degree in CS/IT/Maths, and have an excellent academic record. Candidates having professional qualifications recognized by AICTE, like AMIE, are also eligible to apply.

MT-DS-SS: Self-Sponsored M.Tech. in Data Sciences (MDS):

- This programme is exclusively for professionals working in the industry.
- The candidate preferably should have a BTech/BE degree in CS/EE/IT/ECE, or an MCA, an MSc/MS/ME/M.Tech. degree in CS/IT
- At least 70% marks or 7.0 CGPA in one of the qualifying exams (BTech/BE in CS/EE/IT/ECE, or MCA, or MSc/MS/ME/M.Tech. in CS/IT)
- The candidate must have a minimum **three** years of work experience in a relevant industry and be employed in industry at the time of applying. Internship experience, and the experience before completing the earliest qualifying degree (as listed above) are not counted.
- Exceptional candidates with B.Tech./BE degree or an ME/M.Tech. degree in other disciplines will be considered, provided they have outstanding academic records and strong programming work experience in the industry (which should be clearly demonstrated in the application), and/or strong background in

data science/related areas (which should be clearly demonstrated in the application). The right to shortlist such candidates (with a different academic training background other than in items above) will remain with IIT-H. The objective criteria regarding minimum experience and marks in qualifying exam remain the same as mentioned above.

Some important points:

- Admission to the 2-year M.Tech. with TA (MT-CS-TA, MT-NIS-TA) is guided primarily by GATE score cut-offs and follow-up interviews, as required. Admission offers will be made via COAP (Common Offer Acceptance Portal). The department may conduct further rounds of written tests and interviews after COAP to fill any unfilled seats. Please check our website (https://www.cse.iith.ac.in/admissions/mtech.html) for details and updates on the admissions process.
- Admission to the 3-year M.Tech. Programme (MT-CS-RA) is based on an entrance exam followed by interviews for shortlisted candidates. The department may use other application parameters including GATE score for shortlisting candidates. Interviews test the candidates on standard topics in a Computer Science syllabus (data structures, programming, theory of computation, algorithms, networking, OS, DBMS, etc).
- Admission under the Self-Sponsored and Employer-Sponsored M.Tech. programme categories (MT-CS-SS and MT-CS-ES) will be based on an entrance exam followed by interviews for shortlisted candidates. Valid GATE scores are highly recommended, but not mandatory for these categories. The written test and interviews for these categories will test the candidates on standard topics in an undergraduate Computer Science syllabus.
- Students in a 3-year M.Tech. programme complete the same amount of coursework as 2-year M.Tech. students, but are additionally involved in sponsored research projects and get sufficient time in each semester to work on research.
- M.Tech. students (TA, RA) receive a stipend as per MHRD (Govt. of India) or research project guidelines respectively.
- The department also has the provision for students in the M.Tech. programme to convert to Ph.D during the course of the programme.
- As an exception to the admissions for the 2-year M.Tech. TA programmes (MT-CS-TA, MT-NIS-TA), B.Tech/MSc/MS/MCA students from IITs and IISc with a CPI of at least 8.0 (7.5 for SC/ST candidates) will be granted a waiver from GATE requirement. However they will have to appear for a written test and interview, where they will be tested on programming skills and knowledge of basic CS subjects.
- Candidates in the Employer-Sponsored M.Tech. programme category must be a regular employee of the sponsoring organization with at least 2 (two) years of professional experience in the respective field. The candidate must bring a letter during the interview confirming the employer's agreement to sponsoring the programme for the candidate.
- Prior research exposure and/or industry experience are also considered while selecting candidates in the sponsored and 3-year (RA) categories.
- Candidates still to appear in their qualifying degree examinations may also apply, provided they appear in all their qualifying degree examinations and complete all requirements for their degrees at least a month before the joining semester. If selected, such candidates shall be admitted provisionally, and they will have to furnish the results of their qualifying degree examinations on joining. Further, they must fulfill the minimum requirements of marks/CPI, and other conditions like valid GATE score, etc., as mentioned under eligibility criteria for respective programmes. Failure to fulfill any of these requirements shall automatically result in cancellation of admission.
- The department reserves the right to set any cut off criteria for shortlisting the candidates. The shortlisted candidates will be called for exam/interview as required. The department reserves the right to conduct

interviews for admission to the 2-year M.Tech. programme even if the applicant has a valid GATE score. The department has the right not to select any if appropriate candidates are not found.

- Details regarding the Self-Sponsored M.Tech. programme including selection procedure and fee structure will be updated on our admissions page (link given below).
- Details regarding the MDS programme including selection procedure and fees can be found on our MDS admissions page

The following certificates are to be produced by the candidates in original at the time of interview for verification:

1. Degree / Diploma Certificates or provisional certificates from the competent authority of the University or Institute concerned. (In case of candidates whose results are awaited, producing the mark sheets / grade card will be sufficient. However, if selected, they have to produce the certificate mentioned, for verification, at the time of admission)
2. All Mark sheets / Grade Cards of your qualifying examinations
3. OBC/SC/ST Certificate, if applicable
4. Sponsorship Letter, if applicable
5. Publications, if applicable
6. No objection certificate from the present employer, if applicable
7. Documentary evidence establishing current employment, if applicable

For further updates and latest information, interested candidates are requested to check: https://www.cse.iith.ac.in/admissions/mtech.html