
M.Tech Brochure (Dec 2021)

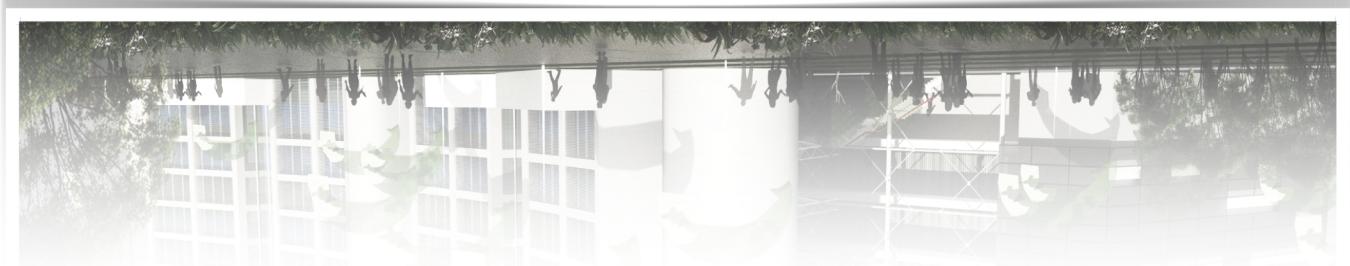
Department of Artificial Intelligence

IIT Hyderabad



Web: <http://ai.iith.ac.in>

Contact: [AI M.Tech admissions](#)



Overview

The Department of AI is a newly launched department at IIT Hyderabad. Considering the interdisciplinary nature of AI, a separate department helps in creating a complete ecosystem for AI Academics and Research at IIT Hyderabad. The department will offer B.Tech. and M.Tech. programs, and plans to offer a variety of Minor Programs in AI. The emergence of the department is the consequence of the heavy demand from the industry on data analytics, and the need to tackle the many fundamental and foundational research problems arising in a rapidly evolving field. The department's mission is to

- Train students to have a sound understanding of the fundamentals of the theory and practise of Artificial Intelligence and Machine Learning.
- Enable students to become leaders in the industry and academia nationally and internationally.
- Meet the pressing demands of the nation in the areas of Artificial Intelligence and Machine Learning.

The Department of Artificial Intelligence has a sizeable number of highly dedicated and dynamic faculty members, with a wide variety of expertise. Currently there are 22 faculty members affiliated with the AI department. Candidates can discover the profiles and teaching/research areas of different faculty members by visiting the department web page.

The Department of AI seeks talented and dedicated M-Tech students to develop highly skilled human resources who can contribute to modern and cutting edge research and industrial demand in AI. The M-Tech students will be provided with excellent laboratory facilities that they can access at any time. The laboratories are equipped with state-of-the-art facilities including software and hardware. All the laboratories are provided with internet connectivity.

| Research areas | |
|---------------------|--|
| Deep Learning | Explainable Machine Learning |
| Autonomous vehicles | Computer vision |
| Generative Models | Video quality assessment |
| Speech systems | AI for agriculture |
| Bayesian learning | Social media and text analysis |
| Robotics | Recommendation systems and data mining |

| Research areas | |
|-----------------------------------|-----------------------------|
| ML in astronomy | Inference algorithms |
| Graphical models | Big data analysis |
| Computer Architectures for AI | AI and Internet of Things |
| AI and High Performance Computing | Natural Language Processing |

The Department of AI accepts applications for the following the following MTech programs for the Dec 2021 cycle:

- Mtech (3 year)

Please see the subsequent sections for details.

MTech (3 yr) program

The Department of AI at IIT Hyderabad offers a 3-Yr M-Tech program for the forthcoming session. The program has following two components in the course curriculum.

- Coursework (24+2 credits)

The AI curriculum is designed to be well rounded and holistic introduction to both the theory and practice of machine learning. Students can do a wide variety of courses, ranging from fundamental theoretical courses to more advanced application based courses. A course on English communication is also included, in addition to industry lectures.

- MTech thesis (24 credits)

Students will work with supervisor(s) to contribute to high quality research in AI.

The 3 year MTech program at IITH has the same number of credits as the 2 year program, but more spread out to enable the student to focus more on research. Students who join the 3-year program will be assigned a supervisor after joining. Students admitted to the regular M-Tech 3-years program are responsible to provide research and teaching assistance to the supervisor. The advantage of the regular 3-years MTech program is that the students can get better exposure to research under the particular program. The students may be paid a stipend at par (if not higher) with the 2-yr MTech students.

Eligibility Criteria for Application

The candidate must have earned BTech/BE/MSc/Equivalent Degree in any discipline, and have a valid GATE score in CS/EC/EE/MA/ST. The applicant must have already earned BTech/BE/MSc or, at least, should be in the final year of the respective studies. In the latter case, it would be assumed that the candidate will be able to complete the degree by the time of M-Tech admission. GATE qualification is relaxed for a) Candidates with a B-Tech / MSc (Math / Applied Math) degree from any IIT and with CGPA score no lower than 8, and b) Project Sponsored, with 6 months experience in IITH.

Selection Process

For admission to the program, there will be a preliminary shortlisting depending upon the academic background and/or GATE score. Candidates who satisfy the shortlisting cutoff need to appear for a written test and/or an interview. The department reserves the right to

For up to date information, please visit

<https://ai.iith.ac.in/mtech-admissions.html>

For any query, kindly write to ai_grad_admissions@iith.ac.in

set any cutoff for the shortlisting of M-Tech applications. In addition, the department has the right not to select anybody if no appropriate candidates are found.

Application Process

IIT Hyderabad has a centralised online application portal for the M-Tech admission. Candidates are requested to visit <https://iith.ac.in/mtechadmissions/home.jsp> for the application format and the submission link.

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