M.Tech (2 yr) Brochure (2020-21) 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 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 the 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	

M-Tech (2 yr) Program

The Department of AI at IIT Hyderabad offers a 2-Yr M-Tech program for the forthcoming session. The program has following two components in the course curriculum.

- Coursework.
- M-Tech thesis.

Students who join the 2-year program will be paid a stipend (as per the MHRD norm) against their service as teaching assistants (TA) to different course instructors. The typical TA tasks include exam invigilation, supervising undergraduate lab experiments, helping with course related activities, and so on. Typically, 8 hours of TA service per week is expected from a student.

Modes of Admission to the M-Tech Program

There are two modes via which a candidate can take admission to a regular M-Tech program.

- Mode R1: With a GATE score.
- Mode R2: With a B-Tech degree/MSc (Math/Applied Math) degree from any IIT.

Eligibility Criteria for Application

The candidate should satisfy the following criteria:

• The candidate must have earned BTech/BE/MSc/Equivalent Degree in any discipline. 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.

• For admission via Mode R1, the candidate should also have a valid GATE score from CS/EC/EE/MA/ST. For having complete eligibility to apply for admission via Mode R2, the candidate must have a CGPA score no lower than 8. SC, ST and OBC candidates will be provided relaxation as per the standard GOI norm.

Selection Process

For admission to the the program via Mode R1 or R2, there will be a preliminary shortlisting depending upon the GATE score and/or the academic background. Candidates who satisfy the shortlisting cutoff need to appear for a written test and/or an interview. The department reserves the right to 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.

Tentative date for written test:First week of May. Offers will be given through COAP 2020. For up to date details, see https://ai.iith.ac.in/mtech-admissions.html For any query, kindly write to ai_grad_admissions@iith.ac.in.