

M.Tech-RA Admissions Brochure

3-Year MTech-program
Session: January 2026



Department of Electrical Engineering
IIT Hyderabad
Kandi, Sangareddy
Telangana: 502285

1. Department overview:

The Department of Electrical Engineering is the largest department at IIT Hyderabad that has **485 students including 235 BTech, 90 MTech, and 160 PhD** scholars. We have a team of 40 dedicated and dynamic faculty members (38 fulltime + 6 affiliated/visiting) and 12 staff members engaged in cutting edge research and teaching in several frontier areas of Electrical Engineering. Please visit <https://ee.iith.ac.in/faculty.html> to know more about their areas of interest.

IITH national and global rankings

8 2021 NIRF ranking (Engineering) 94 2019 QS Asia BRICS ranking

Department of EE @ IITH

1000+ Publications (2014-21) 53+ Patents (2014-19)
4 startups incubated
35+ Completed projects 91+ Ongoing projects
38+ Crore funded projects completed 216+ Crore funded projects ongoing
12.5 LPA (CTC) median salary MTech placements (2018-19)

2. Why choose M.Tech at EE-IITH?

The M.Tech program in Electrical Engineering started in 2009. The M.Tech students have a significant role to play in the growth of the departmental footprint in the research arena. They are provided with state-of-the-art laboratory facilities that they can access at any time.

EE-IITH alumni have achieved excellence all round, in industry and academia. Our alumni are pursuing higher studies in top universities (Stanford, Michigan, UCLA, UCSD,

etc.) and working in major companies (Qualcomm, GE, Xilinx, Intel, TSMC, ISRO, etc.) across the world.

The faculty members of the Department are well versed with the latest industrial practices and endeavor to bridge theoretical understanding and practical applications. We have strong industrial interactions. The continuous feedback received from industries has proven to be helpful to educate the students in a way so that they can develop skills to take up engineering challenges in the real world. Students are always encouraged to share their ideas rather than only following the instructions.

2. Specializations and research activities

There are broadly 2 specializations you can choose from to pursue an M.Tech-RA in our department for this round. The following lists the various research activities in each.

Communications, Signal Processing and Learning	5G, mmWave and LiFi communications, 3D immersive display, AI and ML, Internet-of-things (IoT) and cyber physical systems, Information theory and coding, Performance analysis, Resource allocation and Game theory, Speech and multimedia signal processing, Security and privacy, UAV based sensing, Video Quality Assessment, Statistical Inference
Microelectronics and VLSI	VLSI/ULSI IC and system design, Nanoelectronics, Nano bio sensors, gas sensors, Nanophotonics, metamaterials, optoelectronic devices, Photonic computing and processing, 3DIC, MEMS-ASIC integration, Flexible electronics, Embedded systems, Analog, digital and mixed signal VLSI, RF IC, CMOS Image sensors, Energy harvesting, ICs for wireless communication, Integrated microelectronic devices

3. M.Tech-RA program:

For the current session, the Department of Electrical Engineering at IIT Hyderabad offers the following M.Tech-RA program.

1. Full-time 3-year program (IITH project sponsored/MTech RA) only in the following specializations
 - a. Communications, Signal Processing and Learning
 - b. Microelectronics and VLSI

The above programs have the following three components in the curriculum.

1. Theory courses.
2. Laboratory courses.
3. M.Tech thesis work.

All the above programs have the **same total credit requirement and the credit composition** (i.e., distribution of total credit over individual components). Typically, students have to do 48 credits of coursework (theory+lab+24 credits thesis work), 1-credit mandatory English communication and 1 credit for industrial lectures. Please see https://ee.iith.ac.in/mtech_courses.html to get an idea of the curriculum.

Students admitted to the full-time M.Tech 3-year program are responsible to provide research assistance apart from the teaching assistance. The typical responsibility of a research assistant (RA) includes managing a laboratory, preparing experimental setup for ongoing research, and so on. The advantage of the full-time 3-year M.Tech program is that the students can get better exposure to research under the particular program. .

Please note that the EE department is not accepting applications for the 3-year M.Tech program with MoE fellowship for January 2026. There is only a 3-year M.Tech with fellowship from projects of IITH faculty, and only in Communications, Signal processing & Learning, Microelectronics & VLSI in this round.

At the time of application, the candidate must have an earned BE/B.Tech degree or, at least, should be in the final year of undergraduate studies. The candidate must have a BE/B.Tech degree at the time of admission.

- **3-year M.Tech programs (M.Tech RA)**

- **Mode RA1:** Candidates must typically have a valid GATE score in the appropriate paper. Preliminary shortlisting is through GATE score and/or academic background and research experience of more than 6 months at IITH. Candidates shortlisted will have to attend a written test and interview.

M.Tech Specialization	GATE Paper Code
Communications, Signal processing and Learning	EC
Microelectronics and VLSI	EE/EC/IN/PH

Applications will be accepted only through the IITH admissions portal. Please see <https://iith.ac.in/mtechadmissions/>

- **Mode RA2 (B.Tech degree from IITs):** Preliminary shortlisting is through academic background. Candidates shortlisted will have to attend a written test and interview.

Candidates must have a CGPA of 8 or above in one of the following disciplines in order to be eligible.

M.Tech Specialization	BE/B.Tech Discipline
Communications, Signal processing and Learning	EE/EC/MC/ES/EP/CS/AI or equivalent
Microelectronics and VLSI	BE/BTech in EE/EC/EP/ES/IN/ Nanotechnology or equivalent, MSc or equivalent in Electronics/Electronic sciences/Physics

Applications will be accepted only through the IITH admissions portal. Please see <https://iith.ac.in/mtechadmissions/>

Written test and interview

Written test and interviews will tentatively be in the month of December 2025. Please check <https://ee.iith.ac.in/mtech.html> for the latest details.

Communications, Signal Processing and Learning

In addition to GATE EC syllabus, emphasis will be on:

- Linear Algebra
- Probability and random processes
- Signals and Systems
- Discrete time signal processing
- Analog and digital communications

Microelectronics and VLSI

In addition to GATE EC syllabus, emphasis will be on:

- Basics of electrical networks
- Analog circuits
- Digital circuits
- Fundamentals of semiconductor devices
- Basics of signals and systems
- Electromagnetics

Note

The department reserves the right to set any cutoff for the shortlisting of M.Tech applications. In addition, the department has all the rights to withdraw seats and not select anybody if no appropriate candidates are found. Mere eligibility does not imply that the candidate will be called for the written test/interview.

For deciding the cutoff marks for pre-screening and written test, (applicable for 3-year programs) and CGPA cutoff, the SC, ST and OBC candidates will be provided relaxation as per the standard GOI norm.

4. Application Process:

IIT Hyderabad has a centralized online application portal for the M.Tech admission. Candidates are requested to visit <https://iith.ac.in/mtechadmissions/> for details.

For the latest updates on the M.Tech admissions at EE, IITH, previous year cutoffs, fee structures and additional information, please visit <https://ee.iith.ac.in/mtech.html>.

In case of any queries, please write to: mtech.admission@ee.iith.ac.in