



MTech in Medical Device Innovation

In conjunction with **Center for Healthcare Entrepreneurship and Asian Institute of Gastroenterology Hospitals Hyderabad**

PROGRAM OBJECTIVE

A unique MTech Degree Program to foster the development of world-class affordable medical devices to address the existing gap in the country.

This program, M Tech in Medical Device Innovation shall be offered in association with a clinical partner, Asian Institute of Gastroenterology (AIG) Hyderabad and an Incubator partner, Center for Healthcare Entrepreneurship, IIT Hyderabad.

It shall add impetus for scaling up of Med Tech innovations by translating Academic Research and Clinical Needs Finding into downstream commercial design and development of medical devices

This program is for those for impact-driven students, committed to societal impact with an entrepreneurial and intrapreneurial mindset.

ELIGIBILITY

The students should be eligible with an Undergraduate Engineering Degree (BTech) in any of the following Engineering Branches: Biomedical, Electrical, Engineering Physics, Instrumentation, Computer Science, Artificial Intelligence, Mechanical, Chemical, Biotechnology, Material Science or similar subject areas, or

B Des or MSc in any Discipline or MBBS, BAMS, BHMS, BDS or Any equivalent Clinical Degree with a passion for improving the healthcare quality and conditions over the globe. Candidates with a GATE Score only will be eligible for MOE Fellowship.

Candidates without a GATE Score can apply to the self-sponsored mode Candidates sponsored through from Govt. Labs/ Public Sector and industry need not carry a GATE Score

CURRICULUM

The uniqueness of this program is the core component of courses that focuses on developing core skillsets for a practical biomedical engineer

- Design Thinking
- 3 D Prototyping and Modelling
- Biodesign Process
- Biomedical Devices

Medical Design Innovation Program requires a total of 50 credits including a Capstone Project for 24 credits.

The program requires 4 credits on clinical immersions working with clinicians in hospitals in understanding the unmet needs in hospital.

The enrolled participants will get an early exposure to key courses for translation of a medical device to industry.

- Intellectual Property Rights
- Regulatory track
- Safety and Standards for Medical Devices
- Business Plan Development and Entrepreneurship

Candidates from industry can choose their topic of capstone project in alignment with their industry and carry out their project with respective industry.

CONTACTS:

Center for Interdisciplinary Program,
Department of BME
IIT Hyderabad
Email: renujohn@bme.iith.ac.in,
Ph: 91-8985156631