



భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

MTech Program in **Defence Technologies**

offered under Centre for Interdisciplinary Programs

Indian Institute of Technology Hyderabad

BACKGROUND & PHILOSOPHY

- **Why an M.Tech. in Defence Technologies?** With increasing national emphasis on defence self-reliance and indigenous technology development, there is a growing demand for professionals who can contribute to the design, development, and deployment of next-generation defence systems. The Defence Technologies M.Tech. program is designed to equip engineers with the knowledge and skills required to support this strategic national objective.
- **An Interdisciplinary Approach to Future Technologies:** Conventional engineering education often develops specialists within a single discipline. However, modern defence systems integrate advances from multiple domains including electronics, communications, artificial intelligence, materials, aerospace, and manufacturing. Success in this evolving landscape requires engineers who can understand and work across disciplinary boundaries. The program is structured to provide a comprehensive understanding of the technological ecosystem underpinning modern defence capabilities. Students gain exposure to diverse technology domains and develop the ability to integrate knowledge across disciplines, enabling them to contribute to the development of next-generation defence solutions.
- **Semester I - Building a Broad Technology Foundation:** The first semester is designed to provide students with a broad-based understanding of the defence technology landscape. Through foundational and interdisciplinary courses, students develop familiarity with key technology domains, emerging trends, and system-level perspectives essential for defence innovation.
- **Semester II - Specialized Learning and Deep-Dive Electives:** Having acquired a broad foundation, students can tailor their learning journey in the second semester by selecting elective courses aligned with their interests and career aspirations. This structure enables in-depth specialization in chosen areas while retaining the interdisciplinary perspective developed during the first semester.
- **Industry Internship Opportunity:** To strengthen practical exposure and industry engagement, students have the option to undertake a 6-credit summer internship with industry, research laboratories, start-ups, or defence organizations. The internship provides valuable hands-on experience and opportunities to work on real-world technology challenges.

COURSE STRUCTURE

Semester	Focus Area	Credits
I	Foundational and Bridge Courses (courses open and mandatory for all; specific courses may be tailored based on the background degree)	12
	Industry Lectures	1
II	Deep Dive Courses (Electives from different verticals based on student interest)	12
	Professional Communication & Strategic Leadership	1
Summer	Option-1: Internship at Industry/DRDO Lab	6
	Option-2: Project work at IITH	
III	Thesis Stage-I	9
IV	Thesis Stage-II	9
Total =		50

ELIGIBILITY & ADMISSION PROCEDURE

- Candidate must have earned B.Tech/B.E Degree in any discipline (if the applicant is in the final year of respective studies, it would be required that the candidate will be able to complete the degree by the time of M. Tech admission).
- These students should have first class BTech/BE and admission will be selected based on a written test and/or an interview. The date of the written test and Interview will be communicated to the shortlisted applicants. GATE score is optional.
- Admission available only through self-sponsored category for this admission cycle. Applicant is not eligible for stipend. Please refer to the following web link for details of fee structure of self-sponsored: <https://iith.ac.in/academics/fee-structure/>

CONTACT

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