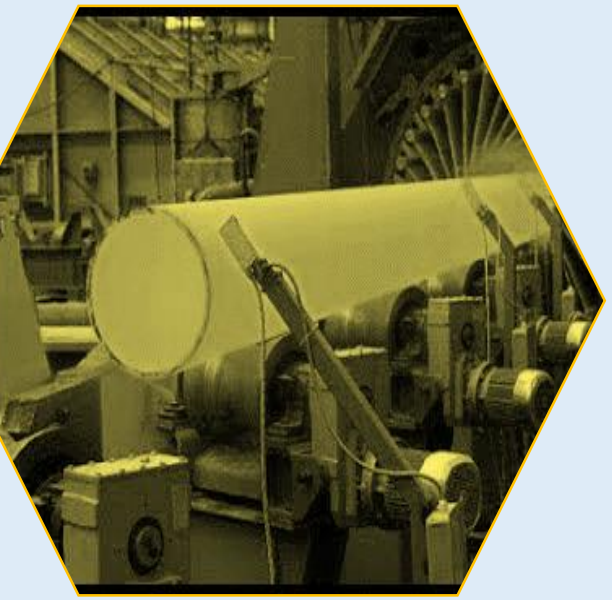
భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

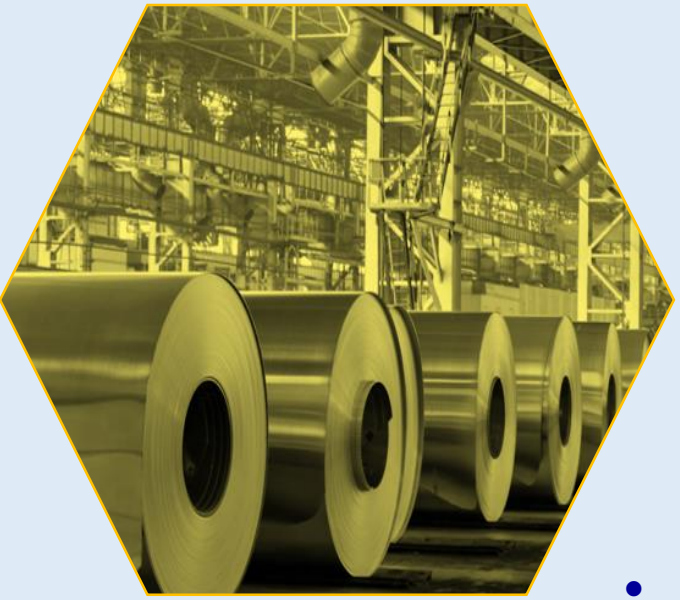
Online M. Tech. in Industrial Metallurgy

Admission
2022-23

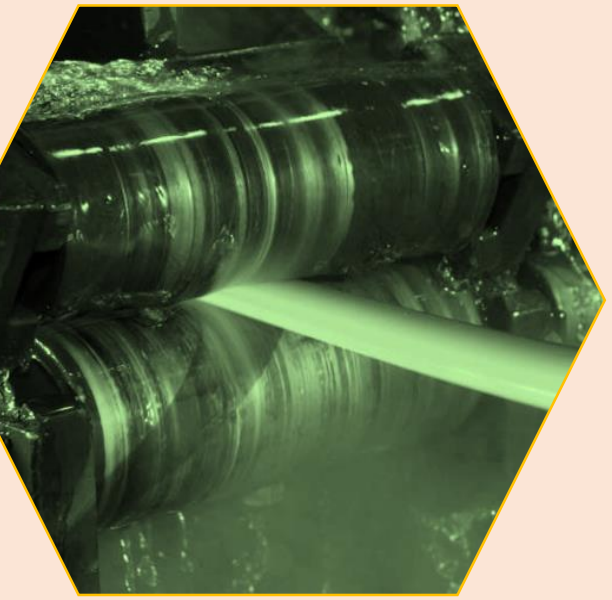
Department of Materials Science and Metallurgical Engineering
INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD

About The Program



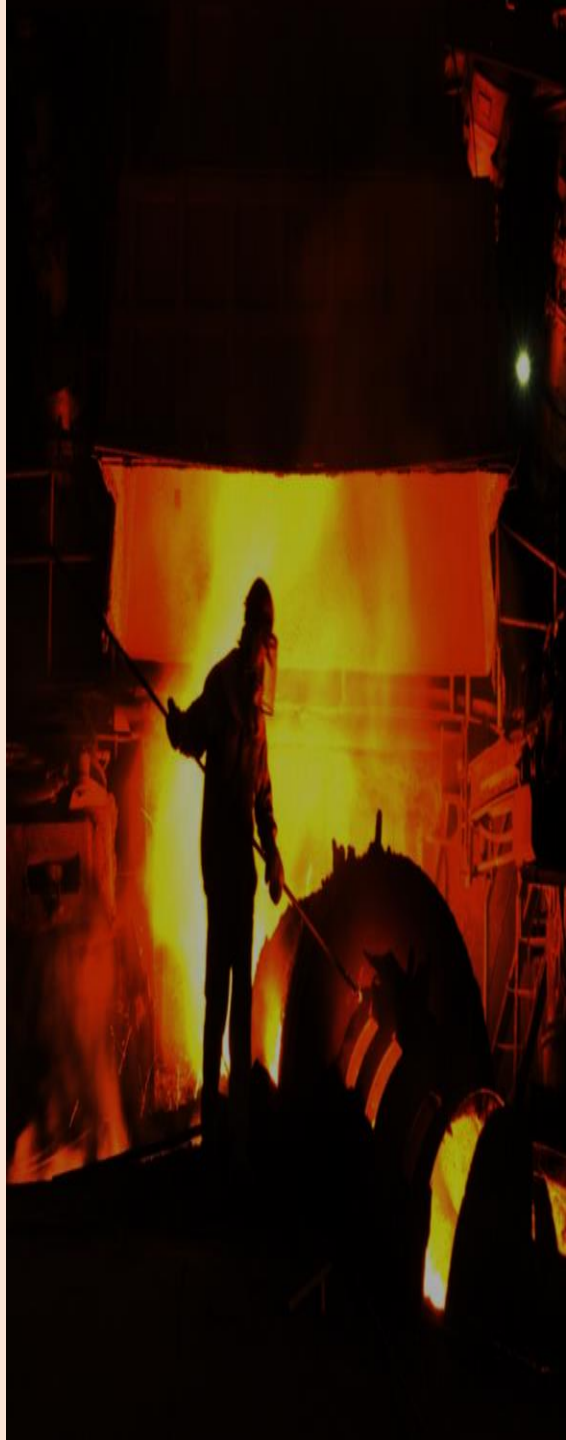


- This program is offered by the Department of Materials Science and Metallurgical Engineering
- This online M.Tech program is specially designed for working professionals to help them master the essentials of industrial metallurgy.
- The program caters to the needs of working professionals in metallurgical, materials, and manufacturing industries who wish to upskill or reskill themselves.
- The program covers both fundamental scientific principles and applied engineering aspects. The program offers great flexibility in terms of courses. It includes a wide range of elective courses spanning across fundamental metallurgical principles, materials processing, materials testing and characterization, new-generation high-performance alloys, and computational materials engineering.
  There is no residential requirement at IIT Hyderabad. All the courses will be taught in online mode (4 PM to 7 PM on working days and 9 AM to 7 PM over the weekends). Students can learn at their own pace and complete the program in 4 years from the date of admission.
- This online M.Tech program is equivalent, in all respects, to the regular M.Tech programs offered by IIT Hyderabad.

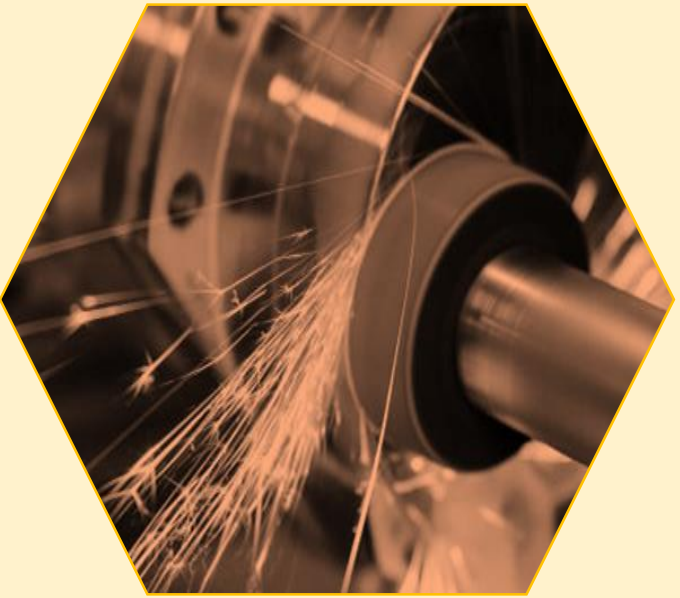


Eligibility and Admission

- Working professionals in public- and private-sector industries, R&D labs, and academic institutions with more than two years of work experience and a first-class bachelor’s degree (BTech, BE or equivalent) in metallurgical engineering, metallurgical and materials engineering, materials science and engineering, mechanical engineering, manufacturing engineering, production engineering, industrial engineering, chemical engineering, and allied disciplines are eligible to apply.
- Admission will be based on satisfactory performance in written test/interview.
- GATE score is not required.
- Applicants are required to submit experience and no-objection certificates at the time of written test/interview.



Courses & Thesis Requirements



- *Credit requirement:* Candidates shall earn a total of 48 credits within 4 years from the date of admission into the program. Candidates shall complete the course credits (24 credits) within the first 3 years.

- *Thesis work:* Candidates shall complete the course work in full (24 credits) to start the thesis work. Thesis will have 24 credits, consists of two stages: a) Thesis Stage-I: 12 Credits and b) Thesis Stage-II: 12 Credits)).

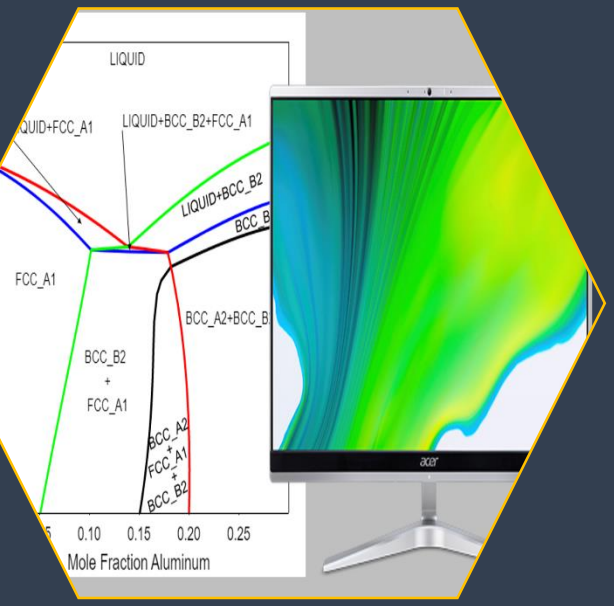
- Candidates are required to carry out their dissertation work using the available facilities/infrastructure in their parent organizations. Every candidate is required to identify a guide from IITH and preferably a co-guide from his/her parent organization.

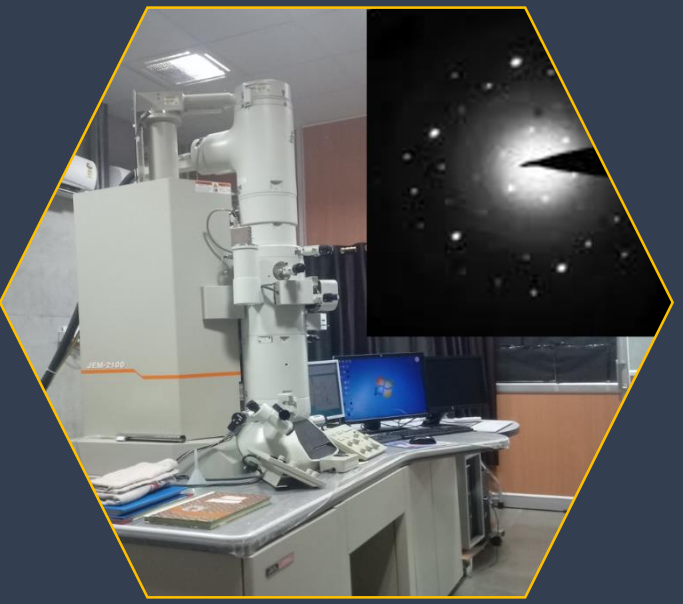
- *Exit option:* After successful completion of the course work in full (24 credits), candidates may opt to leave the program and obtain an Executive MTech Degree.

- A full semester course is of 3 credits. Courses with 1 & 2 credits running at 1/3rd and 2/3rd of semester, are also there.

Courses Offered (Electives)

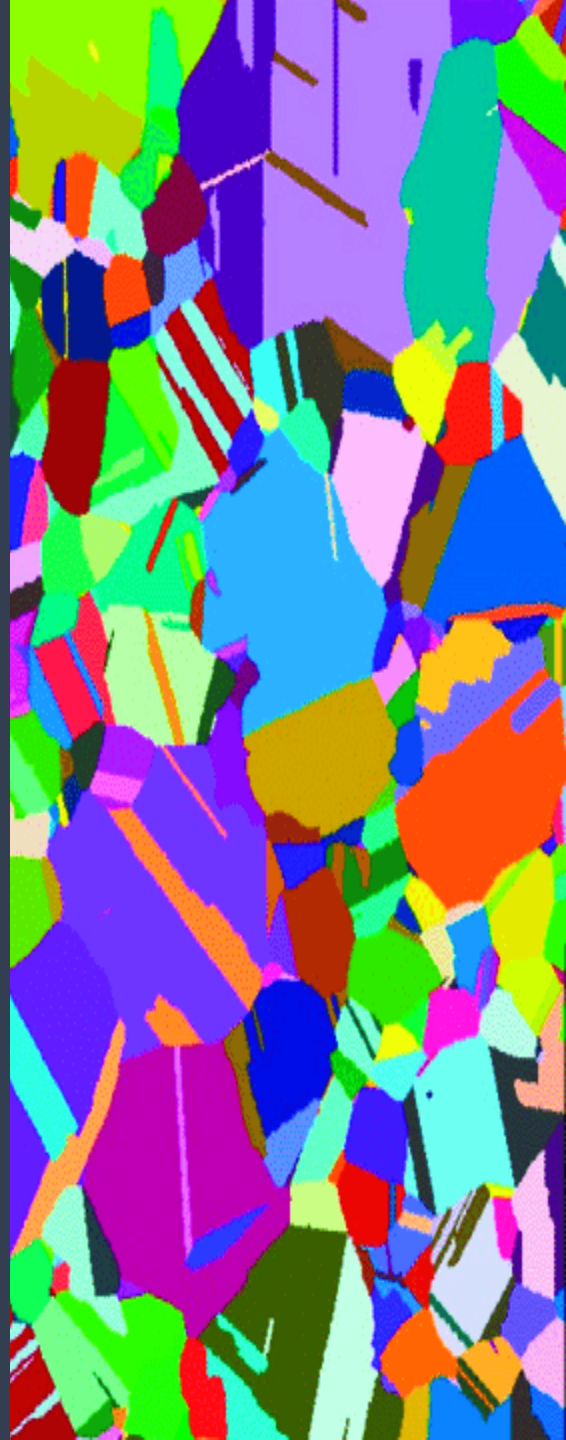
(students need to choose courses from the following elective courses)





- Advanced Physical Metallurgy
- Deformation Behaviour of Materials
- Applied Phase Equilibria and Phase Transformations
- Engineering Alloys
- Corrosion Science and Engineering
- Diffusion Analysis in Materials Engineering
- Role of Microstructure in Materials Selection
- Welding Processes
- Metallurgy of Welding and Additive Manufacturing
- Thermomechanical Processing of Materials
- Casting and Solidification
- Powder Metallurgy Manufacturing
- Metal Additive Manufacturing
- Structure and Characterization of Materials
- Electron Microscopy
- Wear and Tribology of Materials
- Non-Destructive Testing of Materials
- Metallurgical Failure Analysis
- Composite Materials
- High Entropy Materials
- Microstructural Design for Advanced Manufacturing
- Introduction to Computational Methods in Materials Science
- Machine Learning and Data Analytics in Materials Science

(many more new courses may be offered during the program duration)



Fee Structure

Category	Fee details#
Non-government organizations	Rs. 25,000/- per course credit Rs. 12,500/- per thesis credit Semester fee: Rs.15,000/- per semester*
Government organizations	Rs. 12,500/- per course or thesis credit Semester fee: Rs.15,000/- per semester*
IITH alumni	

Fee shall be paid by the candidate and there is no financial obligation to the employer.

* Semester fee must be paid throughout the program duration to keep the registration alive.

How to apply

- ❑ Applications shall be submitted online.
- ❑ Please visit IITH website (www.iith.ac.in) for complete information on how to apply.

Contact

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