



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



Department of Chemical Engineering
Placement Brochure 2025-26
Indian Institute of Technology Hyderabad



Table of content

HOD's Message	1
Why Hire from IIT Hyderabad?	2
Why ChE @ IITH	3
BTech Course Curriculum	4
MTech Course Curriculum	5
Trailblazing success	6
Industry-Academia Partnerships	7
Ongoing Projects at a glance:-	8
Equipped for Innovation: Industry-Ready Labs	9
Placement Statistics	10
Where Our Graduates Excel	11
Engagements Beyond Academia	13
Placement Timeline	14
Class of 2026	15
Contact Us	17



HEAD OF DEPARTMENT'S MESSAGE



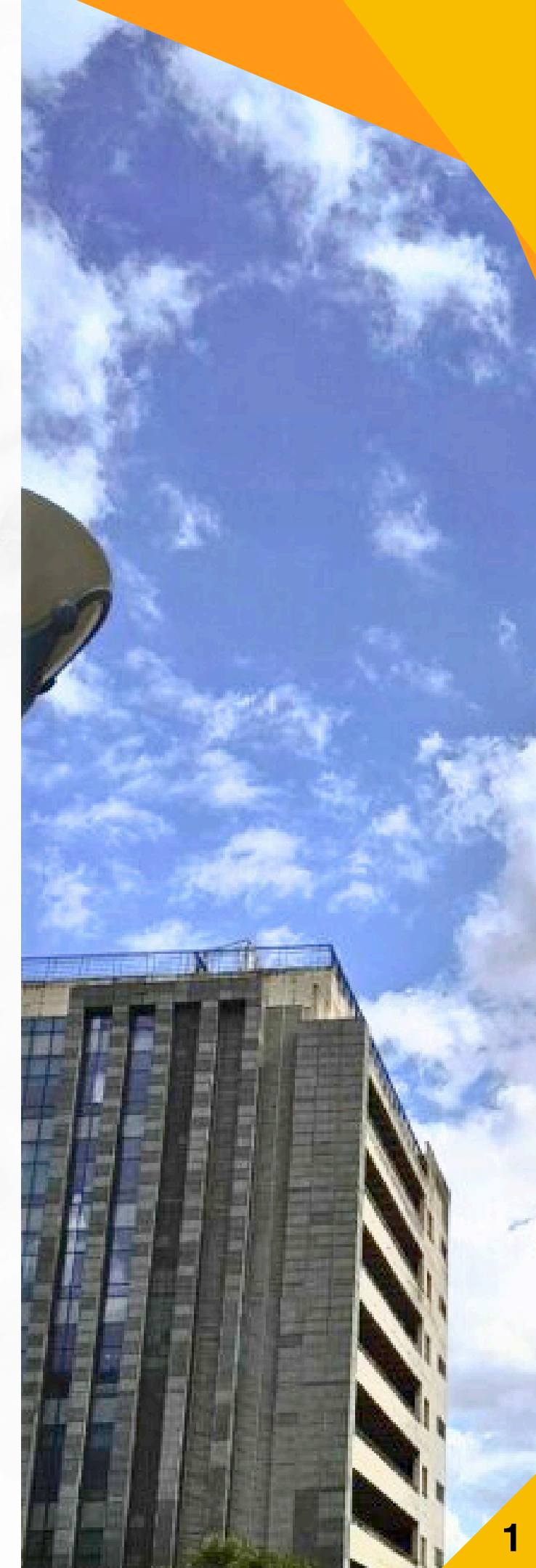
Dr. Balaji Iyer Vaidyanathan Shantha
Head of Department, Chemical Engineering
Indian Institute of Technology, Hyderabad

Welcome to the Department of Chemical Engineering at IIT Hyderabad (ChE@IITH) !!

On behalf of the department, it is my great privilege to present this wonderful stream of engineering to you. ChE@IITH is one of the fastest growing Chemical Engineering Departments in the country and has an excellent reputation in teaching and research, built over the last 15 years.

Our aim is to provide an excellent and accessible chemical engineering education program that is tailored to address technology challenges of the real world. Our dream is to become a department from which future technology leaders of the modern world will emerge. We hope to achieve our objective and fulfill our dreams with the help of young and vibrant team of faculty members, technical staff and scholars. Our core values of responsible training, erudition, integrity and mutual respect are the primary pillars on which the department stands. I believe that with these core values we can build centers of excellence from which future technology leaders will emerge.

Faculty from the department actively address challenges in the fields of health, energy security and national security. We address these challenges by utilizing our research expertise in a range of domains like- Advanced Materials, AI/ML, Biofuels, Catalysis, Drug Delivery, Fuel Cells, Mineral Processing, Nanoengineering, Polymer Engineering, Soft Matter and Systems Biology. The web pages of the department provide more information about the programs, facilities and the faculty members. Please reach out to the office of Chemical Engineering(office@che.iith.ac.in) or the faculty members if you have any queries about the programs in the department and the research facilities.





Why Hire from IIT Hyderabad?

Established in 2008, The Indian Institute of Technology Hyderabad (IITH), recognized as an **Institute of National Eminence**, stands at the forefront of *innovation, research, and talent*. It stands the tallest among all the second-generation IITs with a relentless focus on *innovation, entrepreneurship, and industry-aligned education*, emerging as a preferred talent hub for leading global and Indian corporations.

Recognised among the Leading Institutions in India NIRF (2024)



Innovation



Engineering



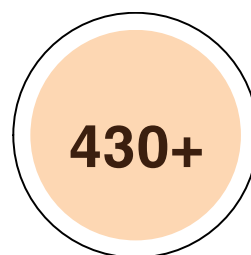
Research



Overall



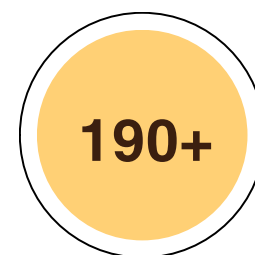
Projects



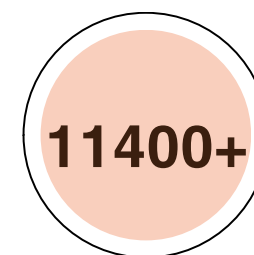
Patents



Citations



Startups



Publications



Why ChE @ IITH?

Academics

At the Department of Chemical Engineering (ChE)@IITH, we nurture the next generation of chemical engineers to tackle today's socio-technical challenges. Our rigorous fractal academic system equips students with the skills and knowledge to excel in their professional pursuits. We foster a dynamic and supportive environment, encouraging students to identify and achieve their goals while developing holistically. Our unique educational ecosystem integrates interactive learning, a flexible academic structure, pioneering research, strong industry partnerships, and entrepreneurship, ensuring our graduates are well-prepared for successful careers.

Research @ IIT

IIT Hyderabad is built on a foundation of research and innovation, offering graduate programs at the master's and doctoral levels across diverse fields, including technology, design, science, and liberal arts. Our MTech program is designed with various modes and durations to meet the growing demand for highly skilled postgraduate professionals. The Department of Chemical Engineering (ChE) provides students with the flexibility to explore a wide range of areas and engage in cutting-edge research within various Chemical Sciences and Engineering domains. We strongly encourage students seeking deeper knowledge to engage in innovative research under the mentorship of our highly qualified and experienced faculty.



B.TECH – COURSE CURRICULUM

Year 1

- Mathematics & Science: Calculus I & II, Modern Physics, Environmental Chemistry
- Computing & Tools: Introduction to Programming (C++), Digital Fabrication
- Communication: English Communication
- Introductory Engineering: Chemistry Lab, Introduction to Chemical Engineering

Year 2

- Chemical Engineering Core: Heat Transfer, Fluid Mechanics, Thermodynamics, Chemical Process Calculations
- Mathematics: Differential Equations, Elementary Linear Algebra
- Interdisciplinary Science: Life Science, Applied Chemistry Lab
- Early Integration: Biological Engineering



Year 3

- Core Subjects: Mass Transfer I & II, Mechanical Operations, Chemical Reaction Engineering I & II, Transport Phenomena
- Labs: HT & FM Lab, CRE Lab, MUO Lab
- Simulation and Control: Numerical Methods, Process Control, Process Simulation Lab

Year 4

- Integrated Design: Process Design and Economics, Process Intensification
- Electives: Departmental and Open Electives
- Research Thesis: Industry-linked or research-driven projects
- Liberal Arts: Unique courses to enhance societal and ethical awareness

M.TECH – COURSE CURRICULUM

Semester 1

- Advanced Numerical Methods *
- Heterogeneous Catalytic Reaction Engineering
- Advanced Process Control *
- Process Integration *
- Process Engineering Lab *
- English Communication
- Electives *

Semester 2

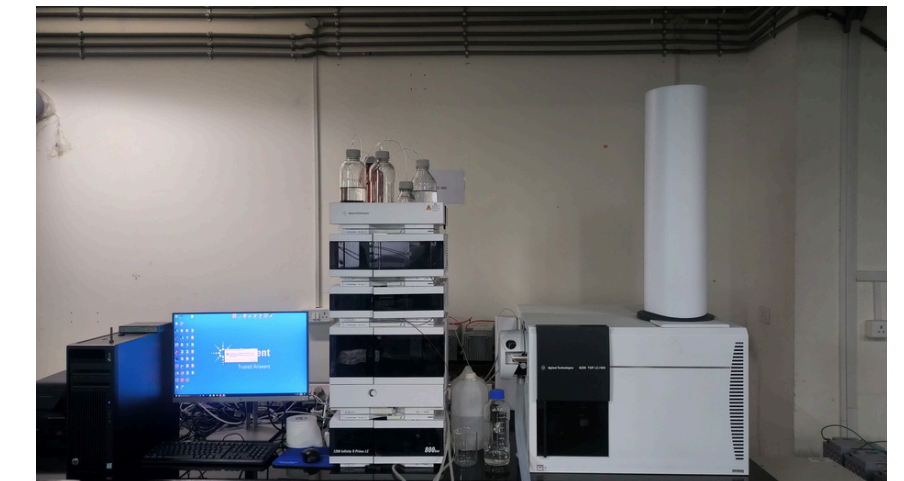
- Advanced Transport Phenomena
- Molecular Thermodynamics
- CFD Lab *
- Industry Lectures
- Thesis (Stage 1)
- Electives *

Semester 3

- Thesis (Stage 2)

Semester 4

- Thesis (Stage 3)



Electives are designed to meet industry needs and modern research objectives. They can be classified among *Sustainable & Alternative Energy, Advanced Process Technologies, Colloids & Soft Matter Systems, Petroleum Refinery, Process Engineering, Advanced mineral processing and many more.....*

* Involves Programming/Modeling/Physics Based Computing/Simulation

Trailblazing Successes...

Faculty Distinctions

- **Prof. Chandrashekhar Sharma** elected as an INSA Associate Fellow(IAF) for 2025.
- **Prof. Narasimha Mangadoddy** received the National Geoscience Award 2023 for contributions to Mineral beneficiation & sustainable development.
- **Prof. Giridhar Madras, Prof. Kirti Chandra Sahu, Prof. Kishalay Mitra, Prof. Narasimha Mangadoddy & Prof. Sunil Kumar Maity** listed in Stanford Top 2% Scientists list.
and many more...

Alumni Success

- **Dr. Venkata Chandrasekhar Palla**, an alumnus of our department is a Scientist at **CSIR-IIP**.
- **Dr. Santosh Kumar Sriramoju** is a scientist at CSIR-NCL.
- **Dr. Kunamalla Alekhya** is a scientist at CSIR-IICT.
- **Mr. Palkesh Saklecha** founded **Beacon organic chemicals**, an entrepreneurial venture.
and many more...

Student Accomplishments

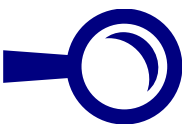
- **Ms. Suharika Diddi** won Young Author award at IMPC-2024, Maryland, USA for Oral presentation on hydrocyclone air-core analysis.
- **Ms. Swasthika Arunachalam** awarded with Best Poster Presentation at the COMFLU held at IIT Madras jointly organised by the centre of Soft & Biological matter, IIT Madras & Indian Society of Rheology.
- **Ms. Shaik Ruksana** won first prize in Sci-Art Competition RSD, KHOJ & **Ms. Pallavi Dandekar** received best poster award RSD, KHOJ
and many more...



Industry - Academia Partnerships

The Department of Chemical Engineering at IIT Hyderabad collaborates with industry leaders to integrate advanced research with practical applications. Through sponsored projects, and shared facilities, they develop solutions for industrial objectives, preparing students for future challenges and driving innovation.





Ongoing Projects at a glance:-



Battery Technology & Recycling

- Lithium-ion battery recycling (hydrometallurgy, pyrometallurgy, deep eutectic solvents)
- Metal-CO₂ battery development (electrolyte optimization) .



Polymers & Drug Delivery

- Tuning Polymer-Solvent Interactions as a Pathway to smart material development.
- Stable pharmaceutical formulations (drug-polymer interactions, DSC, Raman, FTIR, XRD characterization)



Computational Modeling & Simulation

- Multi-phase slurry CFD modeling of industrial cyclones
- Solving PDEs (e.g., ERT) with Physics-Informed Neural Networks (PINNs)
- Simulation of functionalized polymer interfaces



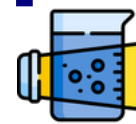
Sustainable Materials & Green Chemistry

- Mycelium-based bioleather for sustainable fashion



Process Design

- Heat exchanger network optimization using cooperative game theory
- Techno-economic Analysis



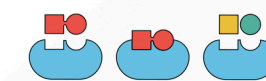
Complex Fluids & Soft Matter

- Drying of complex fluids (gelation, delamination, cracking)
- Experimental investigation of microdroplets (impact, spreading, evaporation).



Microfluidics & Droplets Dynamics

- Synthesis of double-emulsions via microfluidics
- Soft responsive swarms (microfluidics for PVA-Borax-Alginate double-emulsions)



Nanomaterials & Catalysis

- Nanostructuring effects on methane activation
- Catalytic transformation of furanics (e.g., furfural to 2-methyl furan)
- Catalyst deactivation studies (biogas reforming, kinetic Monte Carlo simulations) .



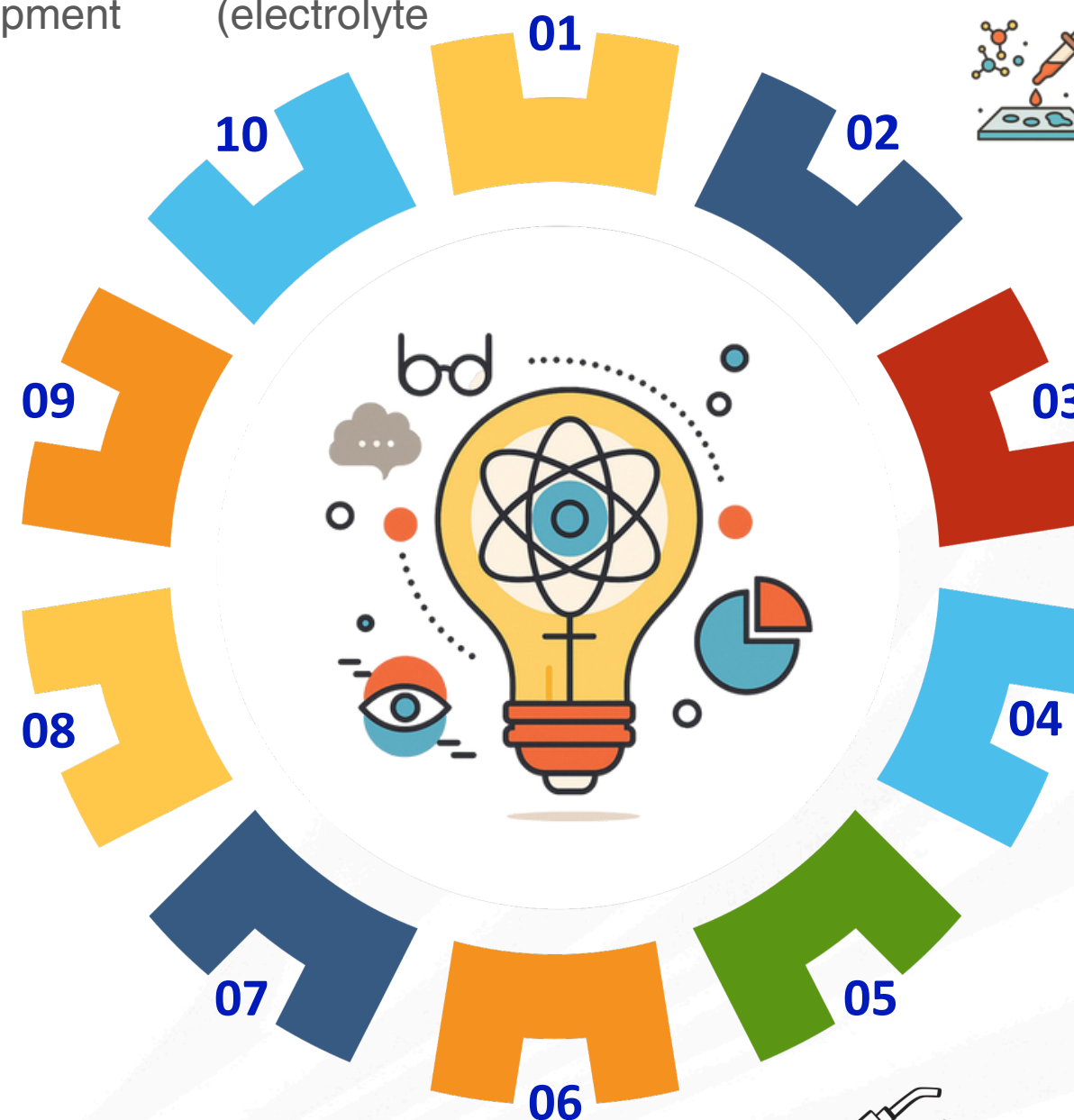
Machine Learning & AI

- ML prediction of activation energies
- AI-based prediction of steel microstructures and properties
- Deep learning for automation in image analysis .



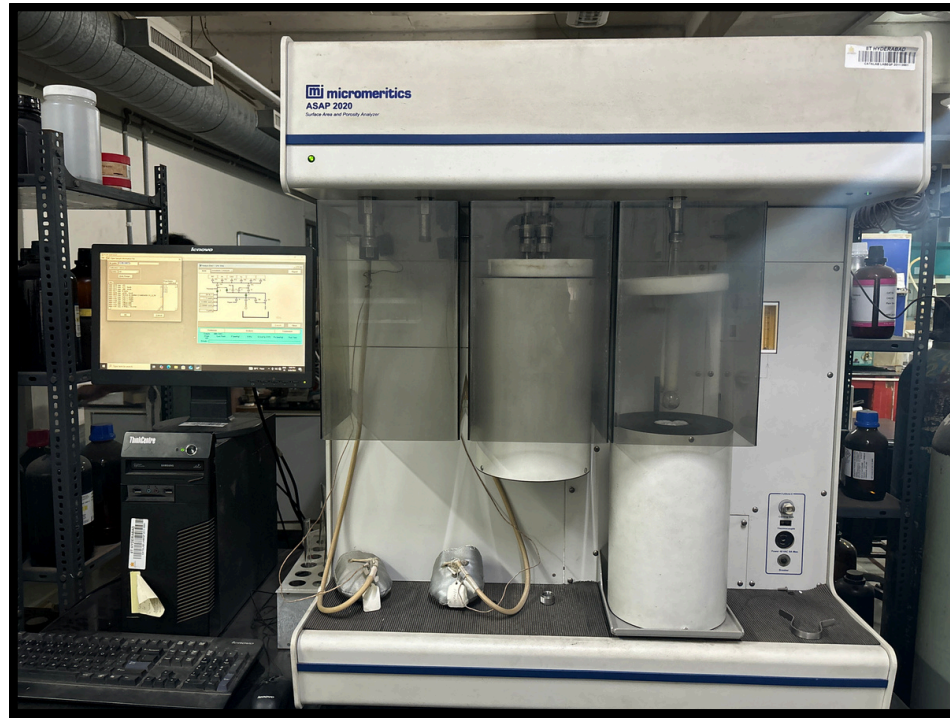
Sustainable Energy & Fuels

- Production of Sustainable Aviation Fuel (SAF) from lignocellulosic biomass & CO₂ sequestration.
- Metal-CO₂ batteries (CO₂ mitigation & energy storage for Mars missions)



Equipped for Innovation: Industry-Ready Labs

“Training the future technocrats on industry-relevant equipments to bridge the gap between academia & industry”



BET Analyzer (Micromeritics ASAP 2020)



LEICA SP8 CONFOCAL MICROSCOPE



GC-MS



HPLC



FIXED BED REACTOR



ELECTROSPIN



ELECTROCHEMICAL WORKSTATION



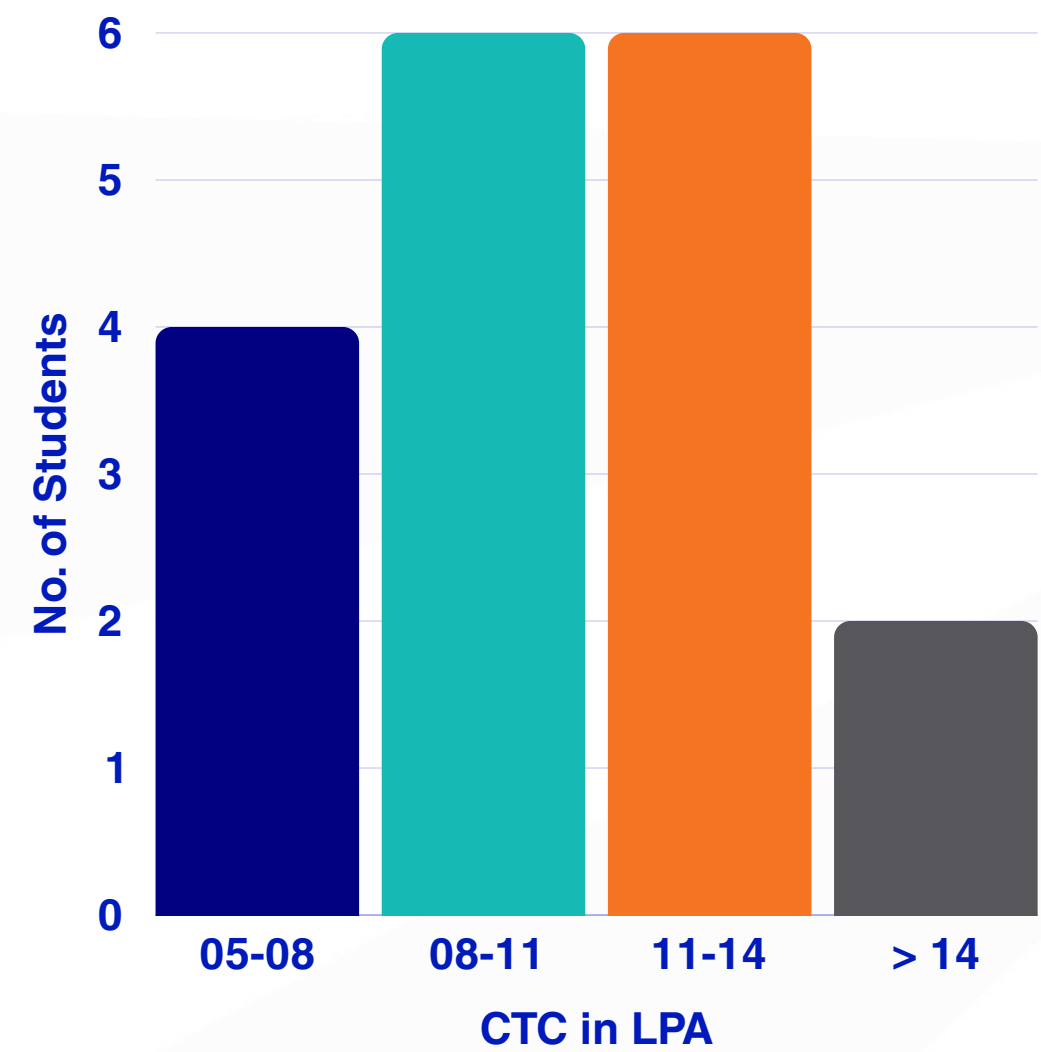
RAMAN SPECTROMETER

M.Tech-Placement Statistics

 **AN IMPRESSIVE 90% PLACEMENT RECORD FOR THE PASSING OUT BATCH...**

- Total no. of offers - 22
- Total no. of candidates placed - 18
- Total no. of candidates - 20

Distribution of offers across CTC range(in LPA)

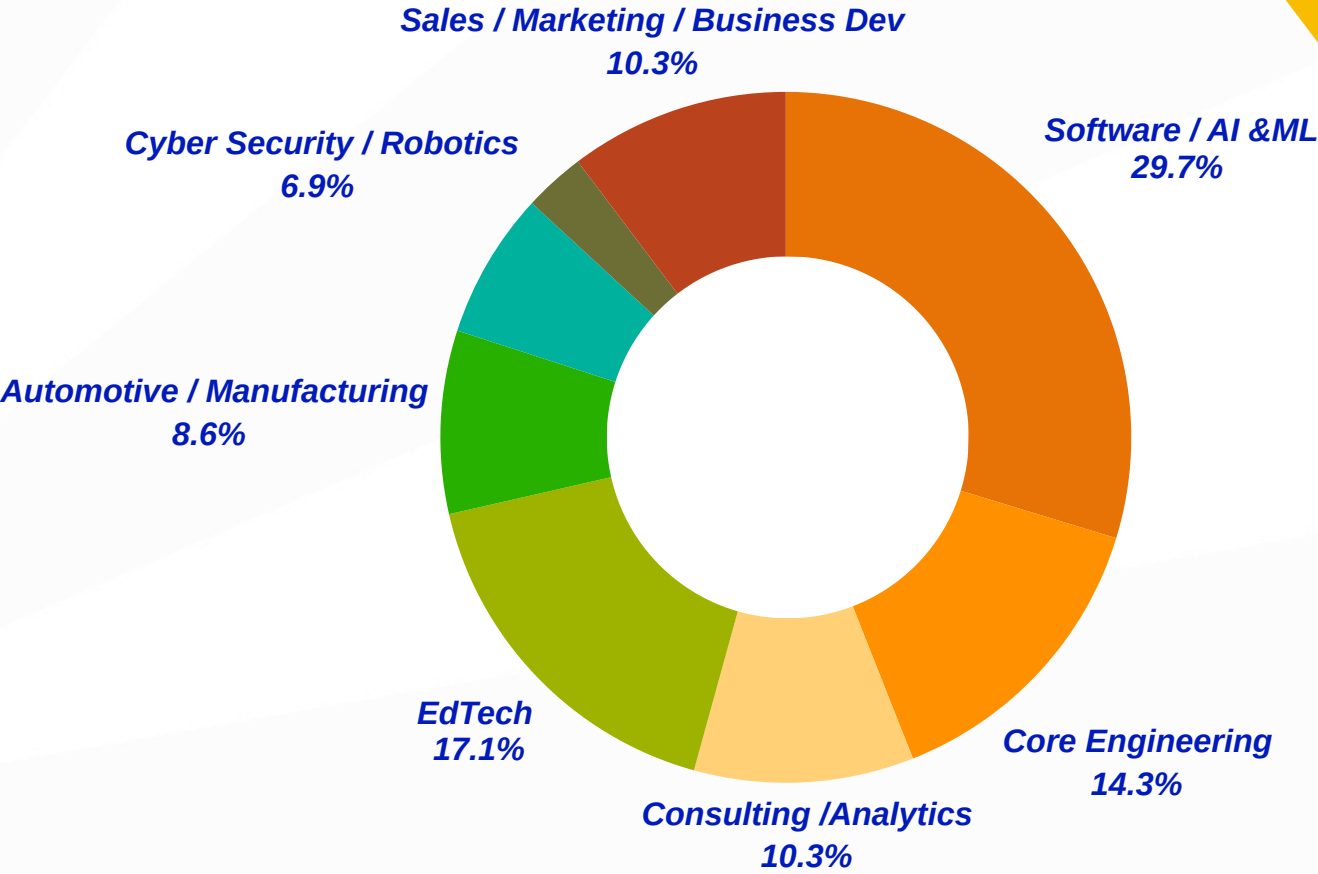


CTC per annum

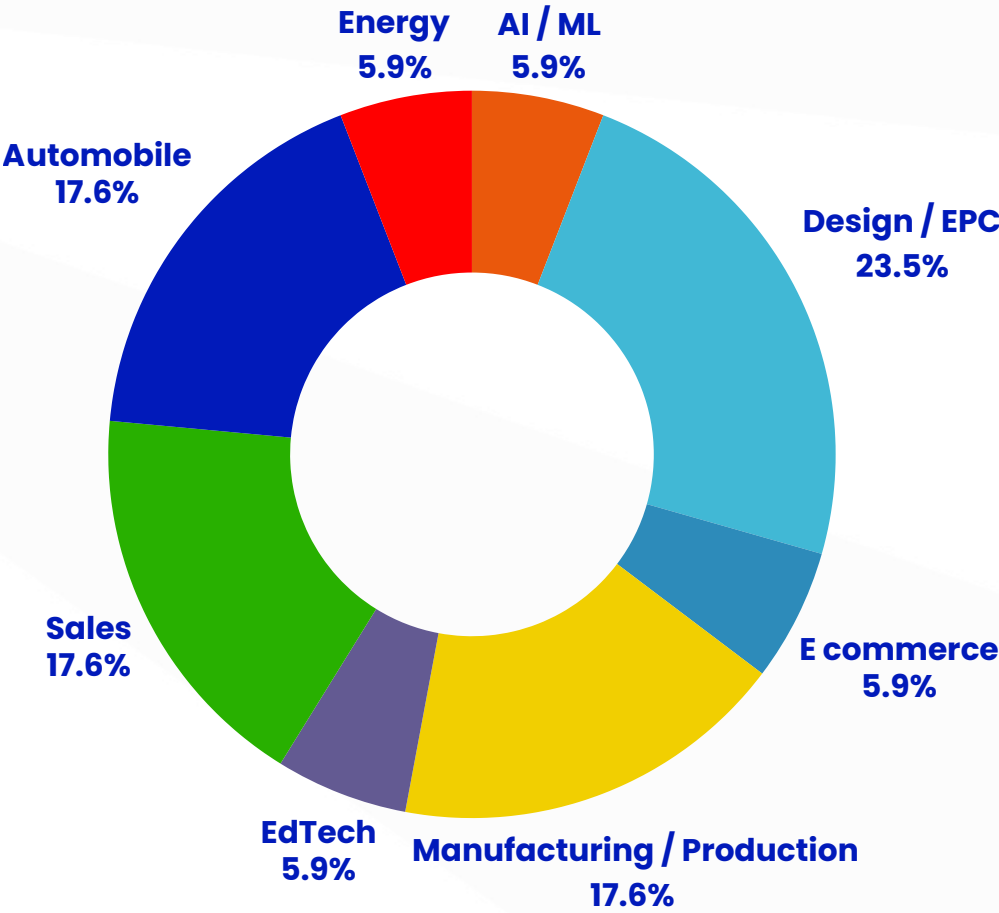
Minimum	600000
Maximum	3250000*
Median	1000000
Average	1204000

*International offer

Broad recruiter domains



Students placed in top sectors



An overview of placement performance, highlighting salary offer ranges and career sectors opted by students.

Where Our M.Tech Graduates Excel

Sector

Roles offered

Recruiters



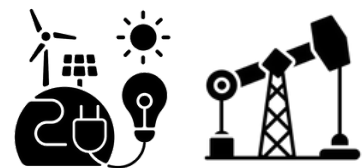
**Manufacturing/
Chemicals**

- PGET
- Trainee Chemical Engineer



LOOMIM
infinite possibilities. finite results.

TOYO INK



**Energy/Oil&Gas/
Renewables**

- Engineering and Technology Associate
- Manager
- NLP Engineer

Baker Hughes

**GLOBAL
CARBON
SOLUTIONS**



**Reliance
NEW ENERGY**



GENESIS



Design / EPC

- PGET
- Assistant consultant
- Simulation Engineer



TATA

TATA CONSULTING ENGINEERS LIMITED



**Pharmaceuticals/
Healthcare**

- Senior Scientist
- Senior officer
- Product selection & Ideation Specialist

Pfizer

MACLEODS

Dr.Reddy's



**Cosmetics &
Innovation**

- Research Analyst

**L'ORÉAL
PARIS**

Sector

Roles offered

Recruiters



Automobile

- PGET



Consulting/IT/AI ML

- Business & Integration Analyst
- ML Specialist
- AI Researcher
- Associate IT consultant



Broadridge®

AsahiKASEI



GENESIS



NTWIST

accenture



Aerospace/PSU/
Research

- Scientist



Tech-enabled
Services/
E-commerce

- Management Trainee Associate



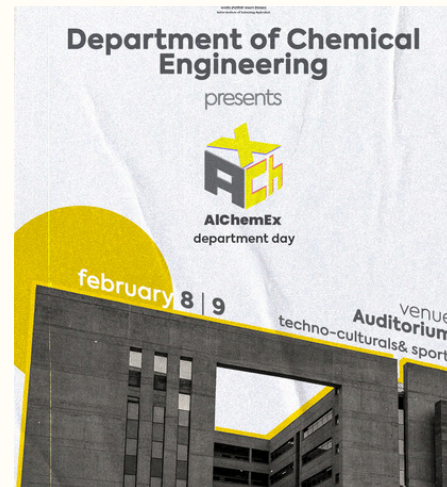
SWIGGY
FOOD DELIVERY APP

Engagements beyond academia



“AlchemEx- The department day..”

AlchemEx is the annual flagship event of the Department of Chemical Engineering at IITH, celebrating innovation, collaboration, and student-led initiatives. It showcases research, creativity, and camaraderie through vibrant activities and exhibitions.



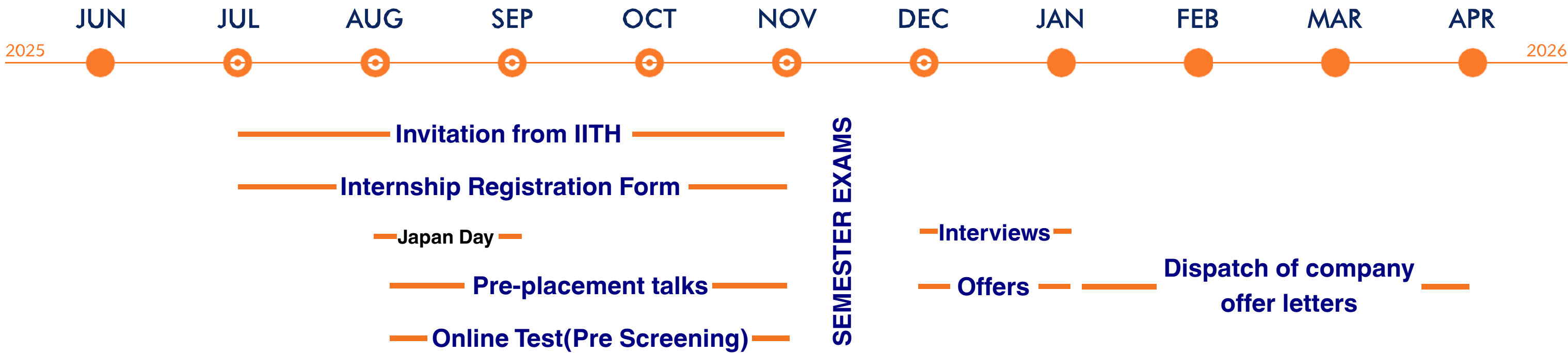
Glimpses of some miscellaneous events....

The events include COMPFLU, AICMRH-an international symposium & workshop on critical minerals, and many more...



PLACEMENT TIMELINE

PHASE 1



PHASE 2



M.Tech Class of 2026...



AMARTYA BIBHU SADUAL



ANUSHA



ATHIRADH R N



EBIN JOSEPH



HEMANTH KUMAR T K



JASMINE SHAIK



JASWANT SINGH



KOUSHIK SAI KILAPARTHI



NIKHIL TEJA CHEEMA



PAHUL CHOUDARY

M.Tech Class of 2026...



PRAKYATH T P



PRASANTH G



PRAVALLIKA DEVI G



SAI CHARAN REDDY M



SERVESH S



SHAMANTHAKA N AITHAL



SRI SATYA SIVANI R



YASHWANTH M

Contact Us :

Visit Us at: <https://ocs.iith.ac.in/>

Recruiter Registration: https://ocs.iith.ac.in/login/company_

To know more about our department visit, <https://che.iith.ac.in> & 

Office of Career Services

Placement Office	office.placement@iith.ac.in	(040) 2301-6810/7066
Dr. Mayur Vaidya	fic.ocs@iith.ac.in	+91 83310 36117
Dhruv Agrawal	ugstudent.placementmanager@iith.ac.in	+91 97540 11653
Mohsin Alam Siddiqui	pgstudent.placementmanager@iith.ac.in	+91 76689 99314

Faculty In-charge - Chemical Engineering

Dr. Lopamudra Giri	giril@che.iith.ac.in	+91 93987 12918
Dr. Suhanya Duraiswamy	suhanya@che.iith.ac.in	+91 99121 20124
Dr. Devarai Santhosh Kumar	devarai@che.iith.ac.in	+91 99081 18512

Student Placement Coordinators

Nikhil Teja CH	ch24mtech11002@iith.ac.in	+91 93816 32825
Hemanth Kumar T K	ch24mtech11011@iith.ac.in	+91 73308 98791
Jaswant Singh	ch24mtech11001@iith.ac.in	+91 99830 76649
Amartya Bibhu Sadual	ch24mtech11003@iith.ac.in	+91 70081 75673
Jasmine Shaik	ch24mtech11005@iith.ac.in	+91 70134 06109



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

THANKYOU