Inventing & Innovating in Technology for Humanity (IITH)



Ranked 6th in NIRF (Innovation)



Ranked 7th in NIRF (Engineering)



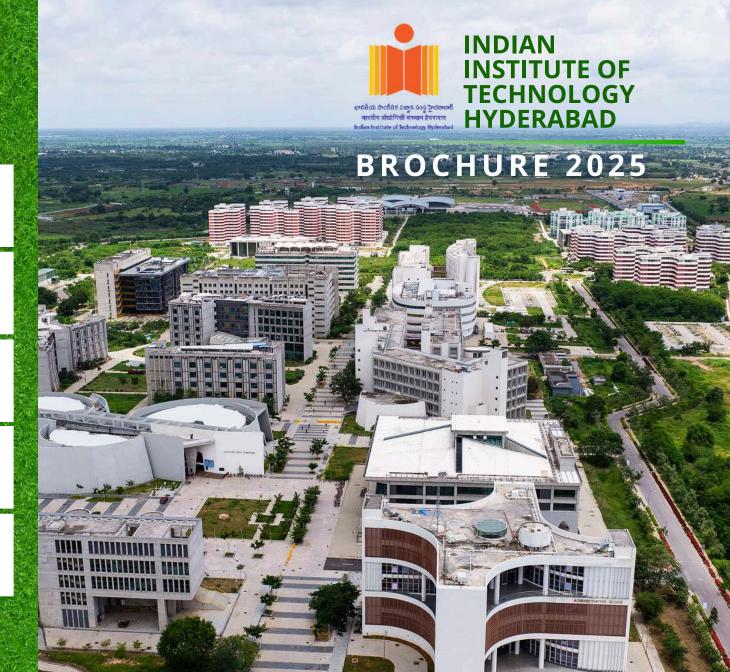
Ranked 15th in NIRF (Research)



Ranked 12th in NIRF (Overall)



Ranked 664 in QS (Global)





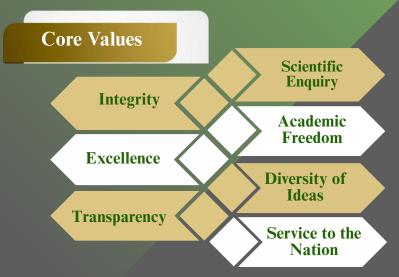
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Vision

IITH will be the cradle for inventions and innovations. It will advance knowledge and scholarship to students in science, technology and liberal arts, and equip them to handle the challenges of the nation and the world in 21st century.

Mission

To be recognized as ideators and leaders in higher education and research, and to develop human power with creativity, technology and passion for the betterment of India and humankind.



It gives me immense pride to present the remarkable strides that the Indian Institute of Technology Hyderabad (IITH) has made across academics, research, innovation, and global engagement. As one of India's leading institutions, IITH stands at the forefront of creating a vibrant ecosystem that nurtures talent.

IIT Hyderabad has reinforced its position as a hub of academic excellence and innovation, as demonstrated by its strong performance in the 2025 NIRF Rankings. The institute has completed a decade in the top 10, securing the 7th position in the NIRF 2025 Engineering Rankings and, for the first time, surpassing one of the first-generation IITs. It also achieved 6th rank in NIRF-Innovation, while maintaining its 15th position in NIRF-Research and 12th in NIRF-Overall. Our rising position in global rankings, including a leap to 664 in the QS World University Rankings 2026, and being ranked in six subjects in the QS Subject Rankings 2025 (with three new entries), showcases our growing global footprint and impact. Notably, IITH features among the top 10% of institutions globally in citations per faculty—an indicator of the strength and influence of our research ecosystem.

Despite global economic challenges, the placement season has been witnessing a good number of offers—testimony to the confidence the industry places in our graduates and curriculum.

Director's Desk

The recent recognition of IITH as an Institute of National Eminence, with 100% tax exemption status under Section 80G of the Income-tax Act, marks a significant milestone in our journey towards greater societal contribution and philanthropic growth.

The academic vibrancy of IITH is reflected in our student strength of over 5,790+ as on Aug 01, 2025, across UG, PG, and PhD programs (60% of them being PG+PhD). We continue to lead in curriculum innovation, with pioneering programs such as India's first B.Tech in Artificial Intelligence. A newly launched recording studio on campus further supports our commitment to digital education.

At IITH, research and entrepreneurship go hand in hand. We have taken bold steps to foster innovation supporting 323 startups through our incubators and launching initiatives such as the BUILD (Bold and Unique Ideas Leading to Development) program for the students. This year, we introduced a bold initiative — BHARATI (Bold Hearted Aspirants RAising to Transform India) — aimed at nurturing fearless engineers of the future. Under this program, 660 firstyear students, guided by 90 dedicated faculty mentors, are actively engaging in hands-on engineering, fostering creativity, innovation, and building solutions that will shape the future. We are committed to creating an ecosystem that nurtures our students to become global leaders, contributing to a "Viksit Bharat" through our motto "Inventing & Innovating in Technology for Humanity (IITH)".

We have also launched an ambitious plan, "Patent a Day: Mission 365", aiming to file 365 patents in a year. As of 2024, IITH has filed over 464 patents, including 210+ in the last year alone. Our state-of-the-art research infrastructure now includes 30+ Centres and Centres of Excellence reinforcing our dedication to impactful research and industrial collaboration.

Internationally, IITH has established 28 strategic partnerships across seven countries—including Japan, Australia, the USA, and several European nations—just in the past year. These collaborations reflect our unwavering commitment to global excellence in education and research.

Our efforts have earned prestigious recognitions: two of our Distinguished Professors were elected Fellows of the Royal Society, and 23 faculty members were featured in Stanford University's list of the Top 2% Scientists globally—further affirming the strength of our academic community. Our alumni continue to inspire us through their achievements—be it generous contributions toward infrastructure and scholarships, or their excellence in civil services, entrepreneurship, and social impact. Their success is a reflection of the values, education, and spirit that IITH fosters.

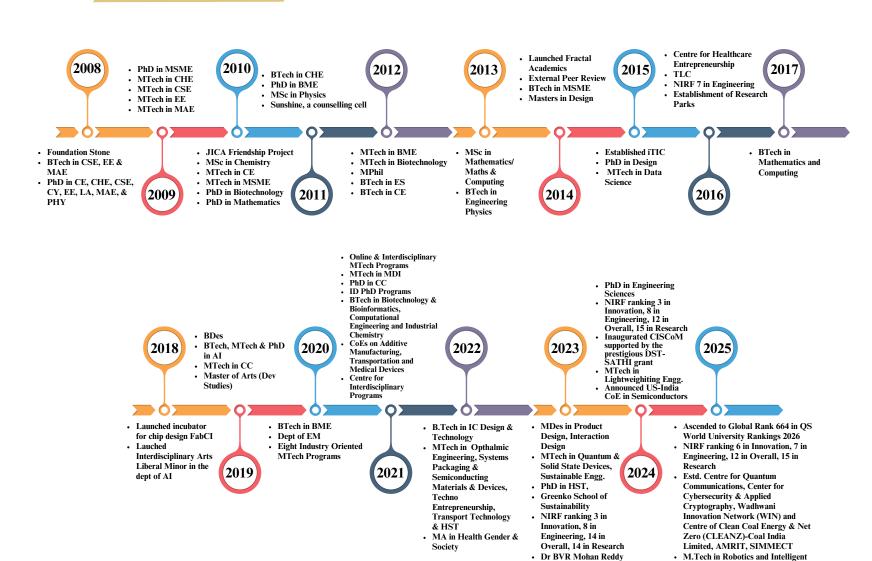
As we look to the future, IITH remains steadfast in its commitment to shaping leaders, advancing knowledge, and addressing global challenges through innovation and collaboration. As India moves ahead with transformative national missions such as Digital India, Make in India, Startup India, Atmanirbhar Bharat, and the Amrit Kaal Vision 2047, IITH is proud to align its efforts with these national priorities. Guided by the philosophy of "Sabka Saath, Sabka Vikas" which means—collective effort, inclusive growth—we are not just witnessing the transformation; we are actively stepping forward to be a part of building a self-reliant, innovative, and successful nation.

I invite all stakeholders—students, faculty, researchers, industry partners, and alumni—to join us in this exciting journey of national development and global impact.

Prof B S Murty Director, IIT Hyderabad



IITH's Journey so far



Systems.

School of Innovation &

Entrepreneurship (BVR SCIENT)

Undergraduate Programs

Departmental Programs:

- Artificial Intelligence
- Biomedical Engineering
- **Biotechnology and Bioinformatics**
- Civil Engineering
- **Chemical Engineering**
- Computer Science & Engineering
- Electrical Engineering
- · Electrical Engineering (IC Design & Technology)
- Engineering Science
- **Industrial Chemistry**
- Materials Science & Metallurgical Engineering
- Mathematics & Computing
- Mechanical & Aerospace Engineering
- Engineering Physics

Center for computational Engineering:

• Computational Engineering

Bachelors of Design

• BDes

Master of Science (MSc)

Chemistry

Chemistry

Mathematics

- Mathematics
- · Mathematics and computing

Physics

Physics

CIP (Inter Disciplinary Program)

• Medical Physics(with Basavatarkam Oncology Inst.)

Postgraduate Programs

Regular MTech/MDes

Artificial Intelligence

· Artificial Intelligence

Biomedical Engineering

- · Medical Sensing, Analytics & Simulation
- Nanomedicine & Biomaterials Biotechnology
- Medical Biotechnology

Climate Change

• Climate Change

Civil Engineering

- · Structural Engineering
- Environmental Engineering
- Hydraulic & Water Resource Engineering
- Geotechnical Engineering
- Transportation Engineering

Chemical Engineering

· Chemical Engineering

Computer Science and Engineering

- Computer Science & Engineering
- · Network & Information Security Design
- · Visual Design
- Product Design
- · Interaction Design

Electrical Engineering

- · Communications and Signal Processing & Learning
- · Microelectronics and VLSI
- Power Electronics and Power Systems
- · Systems and Control

Entrepreneurship and Management

• Techno Entrepreneurship

Materials Science & Metallurgical Engineering

- Materials Science & Metallurgical Engineering
- · Semiconductor Materials and Devices

- · Mechanics and Design
- Mechanical & Aerospace Engineering · Integrated Design and Manufacturing
- · Thermo-Fluid Engineering
- Aerospace Engineering
- · Robotics and Intelligent Systems.

Physics

• Quantum & Solid State Devices

CIP (Center for Interdisciplinary Programs)

- Additive Manufacturing (with DRDO)
- · Medical Device Innovation (with AIG)
- Smart Mobility (with TiHAN)
- · Ophthalmic Engineering (with LVPEI)
- Integrated Circuits and Microsystems Packaging
- · Lightweight Engineering

GSS (Greenko School of Sustainability)

- · Sustainable Engineering
- E-Waste Resource Engineering and Management (with CMET)
- Energy Science and Technology

Online MTech/MDes Programs Computer Science and Engg.

• Data Science

Design

· MDes by Practice

Heritage Science and Technology

• Heritage Science and Technology

Mechanical and Aerospace Engg.

· Computational Mechanics

Materials Science and Metallurgical Engg.

· Industrial Metallurgy

CIP(Inter Disciplinary Program):

- Integrated Computational Materials Engineering
- · EV Technology

Master of Arts (MA)

Liberal Arts

- Development Studies
- Health, Gender & Society

PhD Disciplines

Departmental Programs:

- Artificial Intelligence
- Biomedical Engineering
- Biotechnology
- Chemical Engineering
- Chemistry
- Civil Engineering
- Climate Change
- Computer Science & Engineering
- Design
- Electrical Engineering
- Engineering Science
- Entrepreneurship and Management
- · Heritage Science and Technology
- Liberal Arts
- Materials Science & Metallurgical **Engineering**
- Mathematics
- Mechanical & Aerospace Engineering
- Physics
- Center for Interdisciplinary Programs
- Greenko School of Sustainability

Interdisciplinary Program:

- · Artificial intelligence, computing, communications & networks
- Bioengineering & Healthcare
- Energy, environment, creative design & Management
- Novel materials & computational techniques
- Soft and Active Matter & Mechanics of materials

IITH at a Glance

Academics



Full-time

Faculty







Staff







art Labs





(Innovation)



(Engg. India)





Collaborations





















Research



Centres/CoEs



Centres











Scopus Indexed





÷@;

320+ Starts-ups





Current PhD

Our Thrust Areas











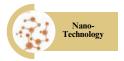


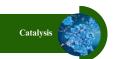






















Major Innovations



Autonomous campus shuttle operates in controlled environments and was deployed at the IIT Hyderabad campus, covering 20,000 + km. With over 10,000 people experiencing the ride, it has received 95% positive feedback. - by TiHAN



First-of-its-kind PuREPower range by Pure EV— advanced and intelligent energy storage solutions



India's First Cellular + Satcom NB-IoT chip which is 3GPP/GCF-compliant



Play-based, smart IoT-enabled screening devices that assist healthcare stakeholders in detecting early signs of Neuro Developmental Disorders by CfHE



World's highest Concrete 3D Printed Bunker with local Materials under extremely harsh environmental conditions in a remote access area in Leh



Safari (Data Collection Vehicle) by TiHAN. First in India to capture multisensory (LiDAR, RADAR & Camera) data across diverse Indian scenarios, traversed 8,000 km+ from IT Hyderabad to Jammu to develop autonomous navigation datasets,



Palyanka -Air Taxi by TiHAN Urban air mobility solution designed for safe, efficient and eco-friendly passenger transport



Bacterial Cellulose based high- performance functional fiber- picture: The first reported cellulose fiber exhibiting the highest mechanical properties among biopolymer-based fibers.



Muscope, world smallest Microscope developed at IITH



Large Area Additive Manufacturing (LAAM) A two meter long component of DRDL fabricated using LAAM

1. Academic Innovations:

- First institute in India to start Fractal Academics, giving a lot of flexibility to students and faculty.
- Unique BTech program (Engineering Sciences) wherein students can choose their curriculum
- Industry oriented BTech programs such as Artificial Intelligence, Biomedical Eng., Biotech. & Bioinformatics, Industrial Chemistry, Computational Eng. and IC Design & Technology.
- Departmental credits of BTech are limited to 60% and 10% of Credits from liberal arts and creative arts.
- Multidisciplinary and industry oriented PG programs.
- Open to All Teaching (OAT) program to open its courses to the whole world through hybrid classrooms.
- Unique departments/schools such as AI, Climate Change, Design, Liberal Arts, Entrepreneurship & Management, Heritage Science & Technology, a School of Innovation & Entrepreneurship, a School of Sustainability and a Centre for Research in Education Assisted by Technologies (CREATE).

2. Industry Connect & Support to Innovation:

- Semester-long internship with 6 credits in BTech to get connected closely with industry.
- Industry defined MTech projects with a one-year embargo on the thesis content to be open to public.
- Minor, Double major, dual degree in entrepreneurship and an MTech Techno-Entrepreneurship through its Entrepreneurship & Management department.
- BUILD (Bold & Unique Ideas Leading to Development) student projects with a 6-credit semester break option.
- Diploma to BTech students after 2nd Year to pursue their startup dreams (Option for BTech in next 5
- Industry oriented Interdisciplinary and Online MTech programs with an exit option of Executive MTech.

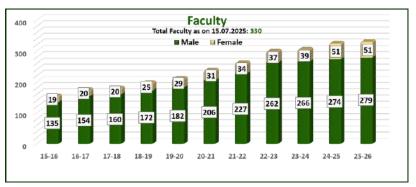
3. Research Innovations:

- First institute with an autonomous vehicle on campus since August 2023 (25,000 km and 30,000 passengers). India's First Test-Bed For Autonomous Navigation.
- Leading institute in 5G/6G, Additive manufacturing, Materials characterization, etc.
- Muscope, the world's smallest Microscope at IITH laboratory to look at the cells in microfluidic chips.
- About 30 Centres in various areas of research set up by government and industry funding.
- Technology Research Park (TRP) for industry and Technology Incubation Park (TIP) for startups with 150,000 sft each.
- Joint Doctoral Program (JDP) and Jointly Supervised PhD (JSP) with several universities and Joint Research Centers with several overseas Universities/Institutes such as Purdue, Deakin, Swinburne, Monash, Shimane, NIMS.
- Identified by JST (Japan Science Technology Agency) as a Hub for connecting Japan to India.

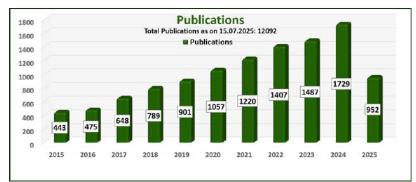
4. National Initiatives & Rural Development:

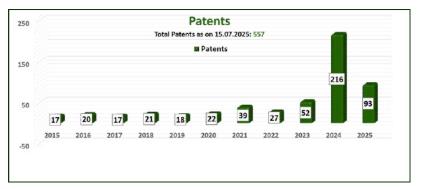
- Creating Database of Indian Researchers abroad by IITH for Vaibhav Summit conducted by MoE.
- Maintaining Research Scholars Database for all IITs.
- Training competent human resources in semiconductors field with support from MoE, Purdue & NTHU.
- Supporting research eco-system in India with 480+ equipment of IITH made available on I-STEM portal
- Creating research, technology and startup culture among students of the country by enabling BTech students from 11 NITs (5 NITs from northeast) to spend their final year at IITH.
- Coordinating GIAN (Global Initiative for Academic Networking) program for the country.
- Several National Centres/Hubs such as TIHAN, 5G/6G testbeds, SITHI-CISCOM, CLEANZ, CoE on Critical Minerals, Heritage Science & Technology, Medical Devices, etc.
- RDC and MSME Skill Development Centre to train school Children and to upskill rural youth.

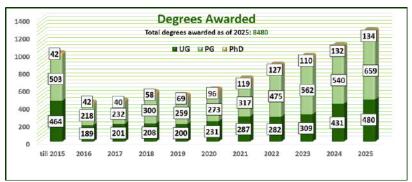
Academics & Research

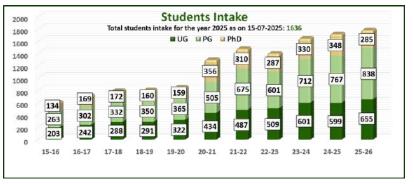




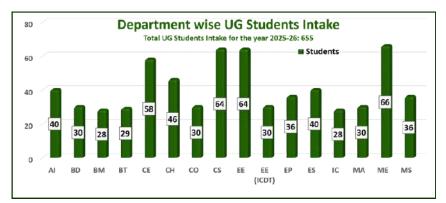


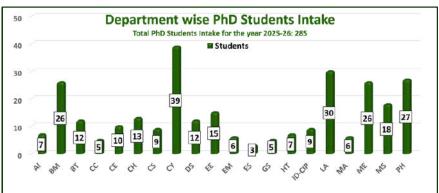


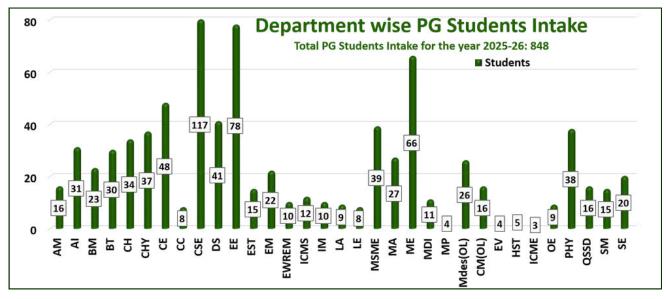




Academics & Research







Artificial Intelligence ΑI Additive Manufacturing AM BD BDes BM **Biomedical Engineering** вт Biotechnology CE Civil Engineering cc Climate Change Chemical Engineering СН CHY Chemistry Computational Engineering co CM Computational Mechanics(OL) CS Computer Science & Engg D8 Design EE **Electrical Engg** EE IC Design & Technology EM Entrepreneurship & Management EP **Engineering Physics** ES. **Engineering Science** EST E-Waste Resource and Engineering Management EΥ EV Technology **EWRM Energy Science and Tech** HST HeritageScience & Technology IC Industrial Chemistry Integrated Circuits and Microsystems Packaging **ICMS** ICME **Integrated Computational Materials Engineering** Liberal Arts LA Light-weighting Engineering LE MA **Mathematics** MDI Medical Device Innovation ME Mechanical & Aerospace Eng. MP Medical Physics MS Materials Science and Metallurgical Engineering

Smart Mobility Sustainable Engineering

MDes (Online) Ophthalmic Engineering

Quantum and Solid State Devices

Physics

OE PHY

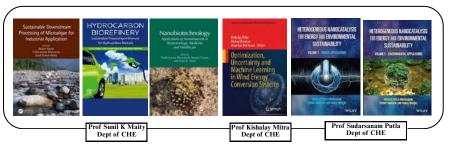
QSSD SM

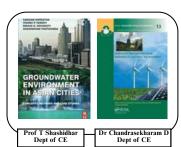
Books Published



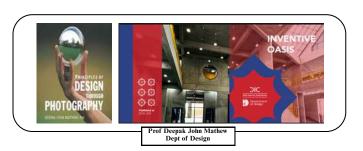






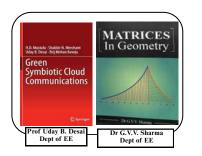






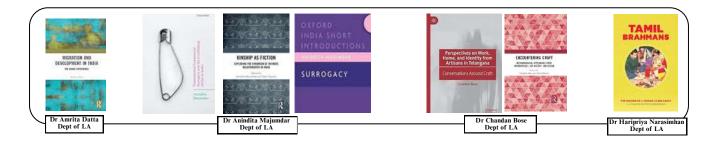






Dr Ankita Roy Dept of Design

Books Published



Dept of LA



Dept of LA

Dr Prakash Mondal

Prof. P P Bhattacharjee

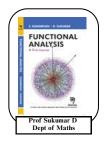
Dept of MSME

& Dr Mudrika

Khandelwal

Dept of CHE & MSME







Prof B S Murty Dept of MSME

& Prof Saswata

Bhattacharyya Dept of MSME





Board of Governors



Chairman
Dr B V R Mohan Reddy
Founder Chairman and
Board Member of Cyient Limited



Ex-Officio Member Prof B S Murty Director, IIT Hyderabad



Member
Prof Vinod Krishan
Senior Professor & Dean
Indian Institute of Astrophysics



Member
Dr Prema Ramachandran
Director
Nutrition Foundation of India



Member
Prof M Lakshmi Kantam
Professor, Institute of Chemical
Technology Mumbai



Member (Central Govt nominee) Smt Saumya Gupta, (IAS) Joint Secretary to GoI Dept. of Higher Education Ministry of Education



Member (State Govt nominee)
Dr Yogita Rana,(IAS)
Principal Secretary to Govt. of
Telangana, Education Department



Member, Senate Nominee
Prof T Shashidhar
Professor, Department of Civil
Engineering, IIT Hyderabad



Member, Senate Nominee Prof J Balasubramaniam Professor, Department of Mathematics, IIT Hyderabad



Secretary Shri V Venkat Rao Registrar, IIT Hyderabad

Deans



Prof Bharat Bhooshan Panigrahi Dean (Academic)



Prof Prem Pal Dean (Administration)



Prof Mahendrakumar Madhavan Dean (Alumni & Corporate Relations)



Prof Sushmee Badhulika Dean (Faculty)



Prof C Malla Reddy Dean (Innovation, Translation & Startups)



Prof Tarun Kanti Panda Dean (International Relations)



Prof Suriya S Prakash Dean (Planning)



G Narahari Sastry Dean (Sponsored Research & Consultancy)



Prof Prasanth Kumar R



Prof Bheemarjuna Reddy
Tamma
Dean (Digital Transformation)



Prof Munwar B Basha Associate Dean (Planning)

Distinguished Professors



Prof Abhay Deshpande Distinguished Professor, Physics and Astronomy, Stony Brook University



Dr Bayya Yegnanarayana INSA Senior Scientist, International Institute of Information Technology



Prof Christopher C Berndt
Professor, Dept of Mechanical Eng & Product
Design Eng,
Swinburne Univ of Technology, Australia



Prof Jun Murai
Professor & Dean of Graduate School of
Media and Governance
Keio University, Japan



Prof James Francis Antaki Professor, Cornell Engineering, USA



Dr Mallikarjun Tatipamula
Chief Technology Officer
Ericsson Silicon Valley, USA



Prof Nobuhiro Tsuji Graduate School of Engineering Kyoto University, Japan



Prof Nemkumar Banthia University Killam Professor, The University of British Columbia, Canada



Dr Omkaram Nalamasu CTO and Senior Vice President Applied Materials, USA



Prof Pramod K Nayar Senior Professor, UNESCO Chair in Vulnerability Studies, Dept of English, UoH



Dr Saraswat V K
Member of NITI Ayog &
Scientific Adviser to Defense Minister, GoI



Prof Seeram Ramakrishna
Mechanical Engineering
National University of Singapore



Prof Shekhar C Mande Distinguished Professor, Bioinformatics Centre Savitribai Phule Pune University, Pune.



Dr Paresh Kumar Narayan Professor, Monash Business School Monash University, Australia



Dr Vidyasagar M, FRS SERB-National Science Chair, India



Dr Rao Surampalli
President and CEO of 'Global Institute for
Energy, Environment & Sustainability,
Lenexa, Kansas, USA

Artificial Intelligence

For more details, visit: <u>https://ai.iith.ac.in</u> Email id: head@ai.iith.ac.in











Thrust Areas











Highlights

- · Publications in ICML, NeurIPS, CVPR, ICCV, ICIP, ICASSP, IEEE Transactions: Signal Processing, Image Processing, CSVT;
- · Patents and Transfer of Technology;
- · Large Sponsored Projects and Industry Consultancy
- · Projects and Application Domains
- · Centre of Excellence on Sustainable cities

Major Facilities

· The Department hosts India's first and only NVIDIA AI Technology Centre (NVAITC)



Biomedical Engineering

For more details, visit: https://bme.iith.ac.in/ Email id: head@bme.iith.ac.in













Thrust Areas -















Highlights

- · Established ICMR-DHR Centre of Excellence for Medical Devices and Diagnostics Mission Secretariat.
- · 3D bioprinted cornea for blinding corneal diseases
- · Bioinspired gold coated phage nanosystem for antimicrobial and anticancer theranostics.
- Enhanced patient comfort and enabling continuous health monitoring using indigenously developed contact-free health monitoring system.
- · Estimation of human affect response to vibrotactil stimulation.
- · Macroencapsulation device for immunoisolation purposes for diabetes.
- · Design and development of chip scale microdevices for bioanalytical applications.



Bioprinter

- · In-vivo Micro CT
- · CRYO-SEM
- · In-vivo Optical Imaging System
- · Envisiontec 3D Bioplotter
- · High-Intensity Focused Ultrasound System (HIFU)
- · In-House Developed Optical Coherence Tomography (OCT)
- 4 &5 axis robotic arms
- · Fluorescence Microscopy



Biotechnology

For more details, visit: https://biotech.iith.ac.in Email id: head@bt.iith.ac.in











Thrust Areas













Highlights

- · Dr Sandipan Ray organized an International Conference on Circadian Rhythms in Health and Diseases: From Discovery to Function (CRHD 2024) in conjunction with the Biennial Meeting of the Indian Society for Chronobiology (InSC)
- · FIST funding was approved for establishing worldclass infrastructure
- · Student award: Student Subhakanta Sethi selected as a delegate for the JENESYS 2024 program
- · Student award: Student Kavita Kundal received the best poster award, Cancer NEXT 2024 conference
- More than 50 publications in the year 24-25
- · Approximately 14 crore funding for S&T research and infrastructure the year 24-25

Major Facilities

- · Ion Channel Assay System
- · BD FACS Melody TM Cell Sorter
- · CD Polarimeter
- · Microscale Thermophoresis
- Octet K2 (Bio-layer Interferometry)
- · Mosquito Robotic Liquid Handling System
- · Fast Protein Liquid Chromatography
- · HPLC
- · Isothermal Titration Calorimeter



Chemical Engineering

For more details, visit: https://che.iith.ac.in Email id: head@che.iith.ac.in













Thrust Areas -













Highlights

- · Waste to Wealth through Smart Supply Chains.
- CompFlu 2024
- · Australia-India Critical Minerals Research Hub: Two-Day Critical Minerals
- · Symposium and Workshop.
- · System Biology Seminar Series
- · Workshop on Applications of Statistics and ML in Life Sciences
- Centre Of Clean Coal Energy & Net Zero (Cleanz)
- The International Conference of Young Scientists -Confluence of Visionaries: Empowering Science for Global Change



Microwave Plasma Atomic Emission Spectrometer (Mp-aes)

- · Horiba Labram Hr Evolution Confocal Raman
- · Spectrometer
- · Optical Tweezers
- · Small Angle X-ray Scattering (Saxs)
- Atomic Force Microscopy (Afm)
- · Hr- Powder Xrd
- · Leica Sp8 Confocal Microscopy
- Microwave Plasma Atomic Emission Spectrometer (Mp-aes)



Chemistry

For more details, visit: https://chemistry.iith.ac.in Email id: head@chy.iith.ac.in











Thrust Areas













Highlights

- · Dr. Somnath Maji group has developed new anticancer metallodrugs based on Copper polypyridyl complexes which are very effective for DNA binding, cleavage, and in vitro antiproliferative activities which are beneficial in the design and development of future antitumor agents.
- · Dr. Priyadarshi Chakraborty's group has developed hydrogel-metal nanoparticle- based catalysts for effective dve degradation.
- · Prof. Surendra Martha's group has developed novel NASICON-type > 3.5 V cathodes for Sodium-ion batteries, developed novel synthesis routes to mitigate residual lithium compound formation for long cycle life NMC-811 cathodes for lithium ion batteries, and aquathermal regeneration of spent graphite for Li-ion batteries.
- · Dr. Koyel Banerjee Ghosh led research on electron-spin catalysis employing chiral-induced spin-selectivity (CISS) effect, which is emerging as an unconventional yet powerful strategy to modulate reaction pathways by exploiting the quantum property of electron spin.



Malvern Panalytical Empyrean X-ray Diffractometer

Major Facilities

- · Small Angle X-ray scattering (SAXS)
- Atomic Force Microscopy (AFM)
- Powder XRD, XPS, DSC-TGA, ICP
- NMR-400 and 600 MHZ, HRMS
- Battery Cyclers, Potentiostat-Galvanostat

Climate Change

For more details, visit: https://cc.iith.ac.in Email id: head@cc.iith.ac.in









Urban





Thrust Areas





HPC









Highlights

- · The department plans to be a leading institute in the key areas of climate sciences, technology, engineering-based design approaches, and social and policy research.
- · Hosted many notable experts and visitors from United Nations University-CRIS, NOAA, University of Colorado at Boulder, ETH Zurich, Hokkaido University, and IITM. Pune.
- Organized a national conclave on "Climate Manifesto for 2047", jointly with Environment Protection Training & Research Institute (EPTRI), in collaboration with the Department of Science & Technology.
- Students won awards at the Electric Vehicle Conference 2025 held in Germany, Climate Change Hackathon, research grant for binationally supervised PhD through DAAD (German Academic Exchange Service), Germany, and participated in the Sakura Science Research Exchange Program hosted by Shizuoka University, Hamamatsu City, Japan.



Climate Change dept: "Research and Activities"

Major Facilities

Bioelectrochemical Reactors, Carbon Capture using advanced materials, Pilot scale CO2 capture using microalgae, Biohydrogen production reactors, High Performance Computing.

Civil Engineering

For more details, visit: <u>https://civil.iith.ac.in</u> Email id: head@ce.iith.ac.in











Thrust Areas











Highlights

- · Portable Assault Bridge
- · Meta-Barrier for the Laser Interferometric Gravitational Observatory (LIGO) India
- · Law of the wall predicts the mean-velocity profile in aturbulent wall-bound flow
- · Climate Change & Overfishing increase neurotoxicants in marine predators.
- · Mercury in Dental Amalgam, Online Retail, and the Minamata Convention on Mercury



TOC-TN Analyzer

Major Facilities

- · MTS Actuator Systems
- · ICP MS
- · Cyclic Simple Shear Apparatus
- · Dynamic Actuator System
- · Repeated Load Triaxial Apparatus for MR

Computer Science & Engineering

For more details, visit: https://cse.iith.ac.in Email id: head@cse.iith.ac.in













Thrust Areas -













Highlights

- · Fraud analytics live data science and analytics project implemented for the Telangana government
- · Techniques for Faster Multi-Core Programming
- · Coding Schemes for Communication
- IITH MEC (Multi-Access Edge Computing) Platform Integrated with 5G Core

- · Infrastructure Management with MAAS (Metal as a Service)
- · SLURM, an in-house HPC cluster management and job scheduling system
- · Servers and Switches, 600+ TB Hybrid Storage System (ZFS, Ceph, Lustre), HPC Cluster, and OpenStack-based Private Cloud
- · Moodle (Modular Object-Oriented Dynamic Learning Environment) & Prutor
- Telemetry and Monitoring Tools (Zabbix)



Accelerated computer Facility

Design

For more details, visit: https://design.iith.ac.in Email id: head@des.iith.ac.in











Thrust Areas -













Highlights

- · Collaborations with industry partners
- · Entered into an MoU with several global universities
- NPTE/OAT Courses by faculty reaching thousands
- Organized 10th ICoRD'25 with 650+ glocal participants
- · State-of-the-art equipment in design applications
- Students and faculty have won several recognitions

Major Facilities

- · Animation/Film/Sound Studio
- · Design for Sustainability Lab
- · Digital Heritage Lab
- · Graphic Design and Binding Lab
- · INDReA, Virtual Experience design Lab
- · Materials Workshop
- · Photography Studio
- · Rapid Prototyping Lab
- · UX Lab
- · VR Cave Automatic Virtual Environment



High density point-cloud photogrammetry data processing and rendering using computational and GPU abilities of the Department to develop close to real immersive Virtual Reality design experiences.

Electrical Engineering

For more details, visit: https://ee.iith.ac.in Email id: head@ee.iith.ac.in











Thrust Areas -













Highlights

- · Enabled Open-Source VLSI on Android Platform
- · Initiated 6G research in the area of convergence between 5G and Satcom
- Muscope: An On-chip Miniature Microscope
- · COVIHOME India First Electronics Rapid COVID-19 RNA Test kit
- · Perception-based Image Quality Evaluator (PIQE)

- Microscope Based Fluorescence Lifetime System
- · CRESTEC CABL-9500C Electron Beam Lithography
- Silicon Etch System Using XEF2
- · Mask Aligner
- PECVD System



Plasma Asher

Entrepreneurship & Management

For more details, visit: https://em.iith.ac.in
Email id: head@em.iith.ac.in











Thrust Areas

Entrepreneurship, Startup Management and Strategy











Highlights

- 1-day Workshop on "Ideas to Impact" at the Department of Entrepreneurship and Management, IITH on 1st March 2025 and a 1-day Workshop on "Ideation to Scaleup: Navigating Operational Challenges" at the Dept of Entrepreneurship and Management, IITH on 5th April 2025
- 1-day workshop for rural farmers on "Celebrate Farming Through Agritourism: Invite, Engage and Grow" at the Dept of EM, IITH on 4th May 2025.
- 3-day workshop jointly organized by BVR SCIENT and Department of Entrepreneurship and Management on "Entrepreneurial Essentials" from 28 April-30th April. 2025 at IITH.
- 13 Japanese startups along with the Deloitte Japan team and JETRO team under J-StarX Program visited the Department of Entrepreneurship & Management, IITH on 22 February 2025 (Saturday). The primary activity as part of this program was the Pitch (by 13 Japanese Startup Founders) and Reverse Pitch Session (by students of MTech Techno-entrepreneurship batch of 2024-26 working with the Japanese startup respectively).

Major Facilities

- · Venture Intelligence Database
- · TRACXN Database
- · YNOS Database
- · Consumer Behaviour and Experimentation Lab
- · Decision Analytics Lab



Liberal Arts

For more details, visit: https://la.iith.ac.in Email id: head@la.iith.ac.in











Thrust Areas -













06

Highlights

- National Conference entitled "Vulnerable Bodies in Literature and Culture"
- International seminar called 'Lifestyles in Conflict: Chronicity and Healing in Contemporary India'
- Demographic Shifts and Reproductive Futures: Entanglements of Science, Technology, Medicine, and Society
- Lifestyles in Conflict: Chronicity and Healing in Contemporary India
- International Conference on Circadian Rhythms in Health and Diseases: From Discovery to Function
- Workshop: Rethinking Neurodiversity, Intellectual Disability, and Care
- · Development Economics Virtual Workshop
- Critical Interrogations of The Digital Urban in India: A Pedagogic Approach
- · Gender and Economics Virtual Workshop

- · Cognitive Science -
- -Transcranial Magnetic Stimulation (TMS) System,
- · Development Studies
- -STATA Software
- LINGUISTICS
- 2-channel electroglottograph (EG2 PCX)
- · ECONOMETRICS LAB
 - R Studio Software



Mathematics

For more details, visit: https://math.iith.ac.in Email id: head@math.iith.ac.in











Thrust Areas









Highlights

- Advanced the study of the structure of Drinfeld modular forms for non-trivial levels, extending the foundational works of Gekeler (1973) and Vincent (2000) on trivial level.
- Given sufficient conditions for the existence of hyperinvariant subspaces of bounded operators in terms of spectrum.
- Developed an algorithm to construct coherent systems using combinatorial signatures, with applications in representation theory and symmetric functions.
- Successfully solved Sarason's problem in twisted Fock spaces—the first such resolution in spaces with nonradial weights.
- Investigated analogues of algebraic connectivity under various norms, uncovering their combinatorial significance in graph theory and network analysis.



Smart Rack

Major Facilities

- Computational Mathematics Laboratory High-performance workstations with MATLAB, Mathematica, Python libraries
- Graduate Research Zones Dedicated spaces for PG and PhD research

Materials Science & Metallurgical Engg

For more details, visit: https://msme.iith.ac.in Email id: head@msme.iith.ac.in











Thrust Areas -

Novel Alloy Development for Defense, Aerospace, Automotive, & Naval Sectors











Highlights

- Design and Development of New High Entropy Alloys/Compounds, Creep-resistant steels, Superalloy welds
- Design and Development of New Multiferroic Materials, Functionalized 2D Materials, Spintronic Devices, Thermoelectrics, Nanostructures for Plasmonics, Bacterial Cellulose-based Nanocomposites, Electrocatalysts
- · Interdiffusion studies in multicomponent alloy systems,
- Development of In-situ electron microscopy techniques,
- Development of GPU-accelerated phase-field models for microstructural simulations in alloys and oxides (modules in open-source MicroSim code, competition between thermal grooving and grain growth, design of ferroelectric solid solutions), First-principles modeling of defects in semiconductors.



- Transmission Electron Microscopes &Focused ion beam facility
- · Field emission scanning electron microscopes,
- Thin film XRD, Nanoindenter, CVD, Sputtering, PLD,
- Thermal Evaporator, PPMS, Scale Rolling Machine, Water models (BOF, EAF, Ladle), Vacuum induction melting furnaces, ThermoCalc Software, VASP



Mechanical & Aerospace Engg

For more details, visit: https://mae.iith.ac.in Email id: head@mae.iith.ac.in











Thrust Areas -

















Highlights

- Offers cutting-edge academic pro Mechanical and Aerospace Engir undergraduate, postgraduate, an
- · Strong interdisciplinary research highly qualified faculty from preinstitutions.
- · Active engagement in sponsored projects and collaborations with private and Government
- · Established dedicated research labs in the areas of Ground vehicle, aerial vehicle, and underwater Vehicle.
- · Industry Connect initiative: Annual MAE-IC Meet, Industrial Visits by Students and Faculties, CSR-sponsored teaching and research labs.

CAE Lab (partially Supported by Collins Aerospace)



Robot

Major Facilities

Computational Labs:

- · High-performance workstations
- · Engineering software for CAD, FEM, CFD, Multibody Dynamics, etc.

Experimental Labs:

- · Experimental Mechanics Lab
- · Acoustics & Vibration Lab
- · Fluid Dynamics & Thermal Lab
- · Robotics and Intelligent Systems lab
- · Smart Manufacturing Lab

Moment of Inertia Setur

Physics

For more details, visit: https://physics.iith.ac.in Email id: head@phy.iith.ac.in











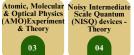


Thrust Areas















Highlights

- · Dr. Saranya Ghosh, as member of the CMS experimental collaboration, named as a laureate for the Fundamental Physics Breakthrough Prize along with other LHC based experimental collaboration members
- · During the academic year 2024-2025, the Department of Physics at IITH actively organized several highimpact national and international events, including the Muon g-2 and BSM Workshop focusing on beyond Standard Model physics, the 17th International Conference on Particle Physics & Cosmology (PPC 2024) in collaboration with the University of Hyderabad, the Belle Analysis Workshop (BAW 2024) centered on advanced data analysis for the Belle II experiment, and the CMS Data Analysis School (CMSDAS 2025), a week-long intensive program on LHC-level data techniquesreflecting the department's strong engagement in frontier research and global scientific collaboration.



- · Vibrating Sample Magnetometer
- MPMS
- XRD
- · Terawatt Laser
- Sputtering system

Heritage Science & Technology

For more details, visit: https://www.hst.iith.ac.in Email id: head@hst.iith.ac.in









Thrust Areas















Highlights

- Indic search engine Information retrieval and Data mining on Heritage Text corpus
- Hands on Heritage Experience and Visualization gamification of Heritage Structures and associated knowledge, 3Dfy Maps, Digital Heritage Documentation and Reconstruction, Structural Health Monitoring, AI for Sculpture, Heritage Clay Structures
- · NeuroBiomechanics of Yoga and Performing Arts
- Computational social sciences Mathematical analysis of Indic society, life and culture
- Chemistry for Archaeology, Heritage Biomaterials Integrated Medicinal systems, Mechanical and Acoustic analysis of musical instruments
- Exploration of Panchadhatu/Ashtadhatu making, Foundational concepts in IKS



TH CSU Summer School in IKS for Sanskrit Student



AI applications on Indian Music Workshop

Major Facilities

- 3D clay printer and its shaker; classical musical instruments, Heritage compute clusters
- · Digital Yoga Studios

Engineering Science

For more details, visit: https://es.iith.ac.in Email id: head@es.iith.ac.in



Thrust Areas













Highlights

 BTech in Engineering Science at IITH is a unique program being offered for the first time in India. It opens the doors to different specializations and provides a holistic engineering education. The basic structure is as follows: for the first 2 years (4 semesters) the student does basic courses in Mathematics, Physics, Chemistry, and different fields of engineering.



Image Compression

- Ability to apply acquired Math, Science and Engineering skills to solve real-world engineering problems.
- Ability to identify, Formulate and solve multi-disciplinary engineering problems.
- Ability to work well in inter-disciplinary teams with focus on System Integration.

Dr BVR Mohan Reddy School of Innovation and Entrepreneurship (BVR SCIENT)

For more details, visit: bvrscient.iith.ac.in

Key Objectives

- · Capability building for potential entrepreneurs
- · Entrepreneurial Ecosystem Enhancement and
- · Capacity building for entrepreneurial mindset.

Highlights

- Two philanthropic foundations, Cyient Foundation and The Shibodhi Foundation, in a unique collaboration with IITH, have established the Dr. BVR Mohan Reddy School of Innovation and Entrepreneurship (BVR SCIENT) on the IITH campus. The school features a state-of-the-art building with advanced teaching and learning facilities.
- Our aim is to nurture and develop world-class innovation and entrepreneurial talent.
- BVR SCIENT strategically leverages the diverse strengths
 of our various departments, particularly the Department
 of Entrepreneurship and Management, to access extensive
 technical knowledge and expertise.



Greenko School of Sustainability

For more details, visit: https://gss.iith.ac.in
Email id: chair@gss.iith.ac.in

Key Objectives

- Greenko Group and IITH are collaborating to establish the Greenko School of Sustainability at the Indian Institute of Technology Hyderabad.
- The School of Sustainability is designed to shape a world that harmonizes with nature and empowers future generations toward a more sustainable tomorrow.
- The objectives of the school are to conduct research and development, education programs.
- The Greenko School of Sustainability is structured as a cross-disciplinary centre that manages seamless participation and knowledge flow from all existing departments and centres of IITH.

Research Thrust Areas:

- · Climate Change Mitigation
- · Energy Transition and Industrial Transformation
- · Recycling, Reuse, Repurposing and Refurbishing
- · Green Chemistry and Industrial Processes;
- · AI and Space Technologies for Climate Change Mitigation
- · Industrial Ecology- Net Zero or Net Negative Clusters
- · Sustainable Habitats

Programs in the School:

The Greenko School of Sustainability offers the following M.Tech programs:

- · Sustainable Engineering
- · Energy Science and Technology
- · E-waste Resource Engineering and Management

Core research areas of the School:





AI TECH FOR SUSTAINABILITY 05 AI and Space technologies for Sustainability





Centre for Interdisciplinary Programs

For more details, visit: https://cip.iith.ac.in/ Email ID: chair@cip.iith.ac.in

Centre for Interdisciplinary Programs (CIP) has been created with a vision of fostering collaboration and integration across different academic disciplines at IITH. CIP @ IITH envisions to create new paradigms in education, integrating techniques, tools and science from multi- and cross-disciplinary expertise on the IITH campus to address complex and multifaceted challenges.

Centre for Interdisciplinary Programs serves as a bridge between traditional academic departments at IITH. Main goals of the centre include

- · Initiate and sustain new interdisciplinary programs
- Promote interdisciplinary research through joint PhD supervision
 - IITH Deakin University Joint Doctoral Program Inter-departmental PhD program
- · Incubate new 'Centres of Excellence'

Highlights

- Artificial Intelligence, Computing, Communications & Networks
- · Bioengineering & Healthcare
- Energy, Environment, Creative Design & Management
- · Novel Materials & Computational Techniques
- · Soft and Active Matter & Mechanics of Materials
- · Robotics, Biomimetics & Instrumentation

Admission to the Interdisciplinary PhD (ID PhD) program is based on collaborative research projects jointly proposed by faculty members from two different departments within the defined research verticals

Objective

- To create opportunities for students, faculty, and researchers from different disciplines to collaborate, share knowledge, and work together on innovative projects.
- To offer unique degree programs by developing and delivering interdisciplinary degree programs that combine elements from various fields to prepare students for a dynamic and evolving job market.
- To provide hands-on experience by facilitating practical learning experiences through collaborative projects, internships, and real-world applications of interdisciplinary knowledge.

Online PG Programs

- · Integrated Computational Materials Engineering
- · Electrical Vehicle Technology





o. of PG Students No. of

PG Programs

Additive Manufacturing: The MTech program in Additive Manufacturing at the Centre for Interdisciplinary Programs, IITH, trains professionals to tackle real-world AM challenges through an interdisciplinary curriculum covering scientific principles and engineering applications. Emphasis is placed on hands-on learning, design for AM, and simulation-based optimisation.

Smart Mobility: Powered by TiHAN, India's first National Testbed for Autonomous Navigation, our M.Tech in Smart Mobility fuses Artificial Intelligence, Computer Science, and Electrical Engineering to cultivate industry-ready leaders for the Autonomous Future and Next-Generation Mobility.

Core Competencies:

- Mastery of AI & Perception
- Systems-Level Engineering & Deployment
- Advanced Autonomous Navigation
- Intelligent & Connected Mobility

Medical Device Innovation

The MTech program in Medical Device Innovation at the Center for Interdisciplinary Programs at IITH is an interdisciplinary initiative blending healthcare, engineering, and design to foster next-gen medical technologies with collaboration of Center for Healthcare Entrepreneurship. Its curriculum focuses on advanced technical skills in Augmented Reality /Virtual Reality, Machine Learning, Signal/Image processing, embedded electronics, and human-centred design.

A unique clinical immersion module exposes students to live medical procedures, enabling context-aware device design grounded in real clinical needs with additional also integration of product management training—covering lifecycle management, market research, go-to-market strategies and data analytics—to cultivate strategic thinkers capable of driving healthcare innovations.

Ophthalmic Engineering

The MTech program in Ophthalmic Engineering at the Centre for Interdisciplinary Programs at IITH, run in close collaboration with L.V. Prasad Eye Institute (LVPEI), combines engineering with ophthalmology to design advanced vision care technologies. The program covers AI-powered diagnostics, ophthalmic instruments, imaging systems, optical design software, and eye biomechanics simulation. It also explores specialized domains such as bio-fabrication for tissue engineering, optoelectronics for light-based diagnostic systems, and the use of lasers in ophthalmology. Students gain valuable clinical and translational exposure in L.V. Prasad Eye Institute (LVPEI), bridging academic learning with real-world impact in eye care.

Integrated Circuits and Microsystem Packaging

Integrated Circuits and Microsystems Packaging (ICMP) MTech program at IITH is an interdisciplinary program that develops manpower and technopreneurs in IC Packaging. Semiconductor ICs are the backbone of the current revolution in electronics and computing. Ability to incorporate more functionality with the same area in an Integrated Circuit (IC) is transcending beyond transistor scaling to innovations in packaging. Heterogenous Integration is the order of the next decade. This interdisciplinary program focusing on designing, fabricating, and characterizing electronic packages and microsystems.

Light weighting Engineering

The Lightweighting Engineering interdisciplinary MTech program is to develop a new generation of engineers and scientists with knowledge and skills in advanced technologies and trained in lightweighting engineering from conceptualization stage to realization. Program focuses on the design, analysis, and development of lightweight structures and materials while maintaining or improving mechanical performance, durability, and safety. Develop proficiency in modern design and simulation tools used in the analysis and optimization of lightweight structures. Integrate knowledge from different engineering disciplines to solve complex problems related to lightweight design and manufacturing.

Medical Physics

Medical Physics is a field that applies the principles, techniques, and methods of physics in both research and practical settings to prevent, diagnose, and treat human illnesses with the aim of enhancing human health and overall quality of life.



Overview

The Centre for Continuing Education (CCE) aims to conduct various outreachprograms for students, academicians, and working professionals across the world. The young and energetic faculty of IITH are dedicated to providing learning opportunities for the professional growth of interested participants. With a rapid rise in E-learning programs, CCE @ IITH is keeping abreast with the online programs that can facilitate the learning of working professionals by meeting their work schedules.

Scope and Functions

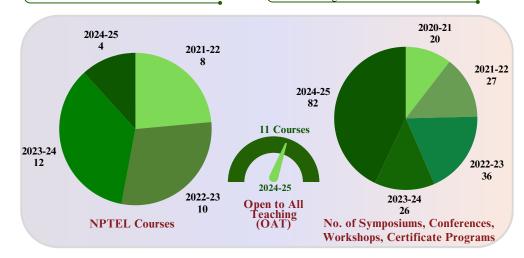
- To conduct all academic outreach activities like Conferences, Workshops, Certificate Courses, Symposia, Shortterm courses, Training programs, and other similar activities of the Institute.
- To organize faculty development programs for faculty of various technical institutes in the country.
- To conduct certificate courses in collaboration with industry and academia to provide specialized expertise/skill development in diverse fields

Programs & Facilities

- Open To all Teaching (OAT)
- NPTEL (National Programme on Technology Enhanced Learning)
- International/ National Conferences
- Workshops, Symposia and Training Programs
- Short-term and Long-term Certificate Programs

Convention Centre Facilities:

- Auditoriums
- Seminar Rooms
- · Conference Rooms
- VIP Lounges











Centres/Centres of Excellence

Incubation Centres at IITH



CfHE (Centre for Healthcare Entrepreneurship) provides comprehensive support to promote early-stage ideas, startups and entrepreneurs in medical devices and healthcare through its diverse and impactful ecosystem. To know more, visit: https://cfhe.iith.ac.in/index.html

Email ID: office.cfhe@iith.ac.in



NM-ICPS TiHAN Foundation established at IITH under NM-ICPS, funded by the DST, GoI, TiHAN focuses on Autonomous Navigation and Data Acquisition Systems (e.g., UAVs, ROVs), and serves as a premier Technology Innovation Hub in this domain. https://tihan.iith.ac.in/ Email ID: office.tihan@iith.ac.in



iTIC is an incubator under the aegis of IITH and supported by the DST, Gol. a Not-For-Profit Society that focuses on creating a supportive and nourishing environment for budding entrepreneurs in the field of technology. To know more, Visit: https://itic.iith.ac.in/ Email ID: office.itic@iith.ac.in



Fabless Chip Design Incubator, a flagship program being executed with the support of the Ministry of Electronics and Information Technology (MEITY) precisely focuses on creating an ecosystem for grooming startups in the area of chip design.

Email ID: Fabci@iith.ac.in



The Center for Cryptography and Cybersecurity aims to be a premier hub for cryptography and cybersecurity research in India. The center conducts research in cutting-edge technologies as well as engages in the training of students and professionals in these areas.

To know more, visit: https://ccs.iith.ac.in/ Email ID: mvp@cse.iith.ac.in



Estd through an MoU between AMS, NEER, INTERACTIVES & IITH, to faster a close partnership that focuses on Geospatial AI & Digital Twins, cultivating a collaborative environment for project initiatives in Geo AI, drones AI, perimeter security AI, BIM AI & Digital Twins applied to defense, industry, environmental safety, climate change, wildlife and more, http://cgdtind.org/ Email ID: shivaii@des.iith.ac.in



The Center of Design Excellence (CoDE) at IIT Hyderabad represents a strategic collaboration between academia and the Telangana MSME industry, aimed at enhancing industrial capabilities through innovative design solutions. To know more, Visit: https://code.design.iith.ac.in/

Email ID: code@des.iith.ac.in



DRDO Industry Academia Centre of Excellence works on 7 Research Verticals. (Ultra-High Temperature Materials for Hypersonic Vehicles, Artificial Intelligence for Missile and Missile Defence, Technologies for Space Application, Adaptive Imaging and Image Processing, Nanoornithopter Technologies, Seeker and Homing Technologies & Additive Manufacturing) Email ID: office.diacoe@iith.ac.in

CMR-**DHR** 1000 1 mm CMR-DER Center of Expellence

ICMR has sanctioned Rs. 15.2 Cr for a Centre of Excellence to IITH to foster innovation & product development in the field of Medical Devices & Diagnostics. To know more, visit:

https://bme.iith.ac.in/Renuweb/research.html Email ID: renujohn@bme.iith.ac.in



The Centre for Godavari River Basin Management Studies (cGodavari) is a multidisciplinary, Multidepartment initiative to help restore and maintain the ecological health of the entire Godavari River Basin. The initiative is funded by the National River Conservation Directorate (NRCD), Ministry of Jal Shakti.



LEANZ The Centre of Clean Coal Energy & Net Zero (CLEANZ) is a CoE committed to promoting the development of high-impact coal-based technologies by integrating advanced scientific approaches with real-world applications. The centre aims to create scalable solutions for clean coal utilisation, CO2 management, and the circular economy. To know more, visit: https://rdc.iith.ac.in/ Email ID: office@cleanz.coe.iith.ac.in



The DBT-SAHAJ facility for single-molecule and super-resolution imaging provides access to cutting-edge single-molecule imaging technologies for life science/biomedical research. Technologies available: 1) Single-molecule tracking in live cells, 2) Single-Molecule Localization Microscopy (STORM/PALM), 3) Single-Molecule FRET, 4) Single-molecule FISH, 5) 5D imaging of live and fixed cells, 6) Image processing and visualization. To know more, visit: www.singlemolecules.iith.ac.in. Email ID: gunjanmehta@bt.iith.ac.in



DIC at IITH works under the MHRD, GoI. Dept of Design – DIC has since been working towards the ecosystem's infrastructure in which Designers and Engineers in academia interact with real-world problems and stakeholders to shape creative entrepreneurial cooperation and collaboration. Email ID: dic@iith.ac.in



The Nikon Centre of Excellence for Optical Microscopy at IITH provides superresolution confocal, TIRF, widefield fluorescence and stereo fluorescence microscopes to support high quality imaging across various fields of research. To know more, Visit: https://coenikon.iith.ac.in/ Email ID: shourva@msme.iith.ac.in

Centres/Centres of Excellence



To support the research activities of the AI department, a Centre for Research and Innovation in AI (क्रिया) has been established with the support of JICA (Japan International Cooperation Agency) and Honeywell.

To know more, visit: https://ai.iith.ac.in

Email ID: head@ai.iith.ac.in



The NVIDIA AI Technology Centre (NVAITC) at IITH is a joint initiative to accelerate AI research and its commercialization. It was established to facilitate research on AI algorithms and develop AI-based solutions for various sectors, including agriculture, smart cities, and language understanding. Email ID: head@ai.iith.ac.in



IITH in collaboration with Swinburne University of Technology (Swinburne). Australia have established SIMMECT—the "Swinburne-IITH Manufacturing, Materials, Energy, and Communication Technologies Joint Research Institute". This centre aims to strengthen the research collaboration between IITH and Swinburne, fostering cutting-edge advancements with significant industry and societal impact.



The Takshashila- Centre for Heritage Science & Technology, located within the Department of Heritage Science & Technology (HST) at IIT Hyderabad, focuses on applying science and technology to conserve and develop India's tangible and intangible heritage assets. This includes monuments, archaeological sites, traditional knowledge systems, cuisines, art, and languages. Email ID: mohanr@bme.iith.ac.in



AMRIT (Advanced Manufacturing Research Innovation and Training) is a joint initiative launched in 2025 by the IITH and Deakin University, Australia, to advance next-generation manufacturing technologies. This collaboration focuses on additive manufacturing, smart materials, lightweight composites, automation systems, and Industry 4.0 technologies to foster innovation, workforce development, and startup incubation in India.



SU IITH is established between Shimane University, Japan and IITH. This centre aims to cultivate the next generation of human resources with an entrepreneurial mindset, strengthening the Japan-India science and Technology partnership and preparing students, researchers and academics to lead industries and contribute to society in both nations



IITH in collaboration with the Wadhwani Foundation, has established a Centre of Excellence, Wadhwani Innovation Network, to drive innovation and research in key frontier areas. The Foundation is supporting the initiative in the areas of Advanced Computing and Artificial Intelligence; Biotechnology and Bioengineering; HealthTech; SpaceTech; Quantum Technologies; Critical Minerals and Mining

- Centre for Research in Education Assisted by TEchnology (CREATE)
- Centre for Computational Engineering Centres: . Rural Development Centre (RDC)



Suzuki Innovation Centre & Next Bharat Ventures at IITH are dedicated to advancing the Next Billion in India by supporting impact entrepreneurs committed to making a substantial difference. Empowering the community of great entrepreneurs creating greater impact, for the next billion. To know more, visit: https://nextbharat.ventures/

Email ID: sic@nextbharat.ventures



Centre for In-Situ and Correlative Microscopy is a consortium of 18 partner institutes supported through the DST-SATHI program. This centre would be the first in the nation to enable real-time characterisation across multiple length scales for fundamental and industrial R&D purposes. This centre is headed by Dr. Sairam Malladi.

To know more, visit: https://sathi.iith.ac.in Email ID: sathi.ciscom@admin.iith.ac.in



Sustainable Technologies Centre for Critical Minerals and Metals Processing (STC M P)- CoE under National Critical Mineral Mission by Ministry of Mines, GoI. This CoE focuses on recovering critical minerals from e-waste, industrial residues, ash sources, and primary ores (Ni, Co, V, Ti). The CoE aims to drive innovation, reduce import dependency, and promote sustainable practices, strengthening India's mineral independence.

Email ID: narasimha@che.iith.ac.in



IITH inked an MoU with the National Highways Authority of India (NHAI), Ministry of Road Transport and Highways, GoI, to establish a TRI HUB. This Centre of Excellence at IITH will work on contemporary and cutting-edge technologies for National Highways in India.

To know more, visit: https://trihub.iith.ac.in/Home.html Email ID: office.trihub@iith.ac.in





Jointly established Center of Excellence in Semiconductors (CES) with Purdue University, US. Purdue University has announced a partnership with India that includes the creation of the Purdue Centre for Education and Engagemen Centre of Excellence in Semiconductors.



The Center for Quantum Communications (COC) is a Center of Excellence at IIT Hyderabad focusing on Secure Quantum Communications. The Center hosts a branch of the Ouantum Communications Technical Hub of the National Ouantum Mission, Researchers in the COC work on design, development of Quantum Key Distribution (QKD) systems, design and analysis of secure quantum network protocols, and OKD systems based on Photonic Integrated Circuits.





VIGRAHA (Virtual, Intelligent, Ground-breaking Research in AR/VR & Hightech Applications for Indian Army) CoE has established in collaboration with with the Army Training Command, Shimla, represented by the Simulator Development Division (SDD), Secunderabad This collaboration aims to spearhead cutting-edge research and development for the Indian Armed Forces. Email ID: shivaji@des.iith.ac.in

- SAHAJ
- Teaching Learning Centre (TLC)

Campus Facilities















- 24X7 Hospital & Pharmacy
- Knowledge Resource Centre (Library)
- · SBI, Canara, HDFC, and ICICI Banks on campus
- · Recreation centre
- · Tinkerer's lab
- · E-Cell
- Lecture Hall Complex
- Supermarket
- · World-class indoor and outdoor sports facilities

- · Olympic-size Swimming Pool
- · Cultural amenities
- · Post Office
- Open Air Theatre with 40x20 ft LED
- Cafeteria (Domino's, Yummpys, Chennai Coffee Shop, AI Food GPT, Brown Bear **Bakers and other outlets)**
- Vending Machines
- Speciality Clinics
- · Recording Studio

Knowledge Resource Centre (Library)

For more details, visit: https://library.iith.ac.in/

KNOWLEDGE KRC at a glance Knowledge Resource Centre















- RFID based Book Circulation System
- Search using Summon discovery
- Self Issue-Return Kiosk
- Information Kiosk
- **RFID Security gate**
- **OPACs-Portable**
- Digital Wall
- · Displays
- · Recording Studio
- · Learning-Commons-Lab1
- Research-Commons-Lab2
- Video-Conference-Room
- Virtual-Class-Room (AV-1)
- Seminar Room (AV-2)
- · Meeting-Room

State-of-the-art equipment at KRC

- · RFID Gate
- Self Check-in / Check Out Kiosk
- · Portable OPACs
- · Book Scanner
- Digital Wall
- · Displays
- · Kiosks

Academic & Research Tools & Services











Innovation at IITH IITH Entrepreneurship Ecosystem

ACADEMICS GERMINATION PREINCUBATION INCUBATION **ACCELERATION** HOST **Entrepreneurship CfHE** Minor **Technology** Cell Research Park iTIC Incubator **Double Major BUILD Projects Technology Innovation Park TiHAN Dual Degree** FabCi MTech in Techno-Entrepreneurship Fabless Chip Design Incubator (FabCI) For Details, Visit: https://cfhe.iith.ac.in/ **NMICPS TiHAN Foundation** For Details, Visit: http://fabci.iith.ac.in/ For Details, Visit: i-TIC Foundation **Technology Research Park** https://tihan.iith.ac.in/ For Details, Visit: https://i-tic.iith.ac.in/ For Details, Visit: https://trp.iith.ac.in/

The General Council is an umbrella term for various bodies which not only perform representation tasks, but also cater to student welfare, societies, entertainments etc. The General council strives towards the general welfare of the students.

For more details, visit: http://eymkhana.iith.ac.in/



Cultural Council



The Cultural Council are a motivated group of individuals who believe that a college should have its equal share of fun & frolic along with the case studies. Clubs under Cultural Council are Infocus, Behind the lens, Vibes, Rang de manch, Gesture Shuffle, LitSoc.

IITH's sports is one of the more brilliant facets of this campus life. IITH offers plenty of sports facilities, which include a common football & cricket ground, a hockey ground, a well-equipped swimming pool, floodlir courts for basketball, badminton, tennis, and multiple courts for volleyball. Facilities for indoor games like table tennis, caroms, and chess are also available.





Media Council



The media council of IITH was formed in May 2014 & is a student council that helps take IITH to every individual in & outside IITH. They are involved in publicizing our institute through social media, social events, etc. The Media Council is currently engaged in various newsletters of IITH like the guidance of different faculties, and PR Office of IITH.

The Sci-Tech council is headed by Science and Technology Secretary. It encompasses nine societies: AeroClub, Cepheid, Elektronica, Kludge, Infero, Lambda, Prakriti, Robotix and Torque which covers the diverse nature of science and technology. Various events are organised from time to time, starting from orientation of all these clubs





Mess monitoring council, also known as MMC, assists in the robust functioning of mess in coordination with mess wardens & HCU. Headed by the mess secretary, it represents the students' voice. It also regularly inspects the operations to look for various faults & ensure that food quality is maintained at ITTH. It strives to ensure that all the students have enjoyable and healthy meals at their second home.

Mess Council



Student Arena





Sunshine: The Counselling Cell

Since its inception on January 12, 2012, Sunshine- the counselling cell at IITH, has been committed to helping the student community. The dedicated team of Sunshine comprises a Faculty in Charge, three Psychological Counsellors, 19 faculty representatives, 18 student heads, 23 PG mentors, 28 PG buddies, 8 PhD dept representatives, 48 UG mentors, 41 UG buddies and 21 management team members.



















IITH has built a strong network of alumni who create valuable opportunities for the Institute's development and to support its key strategic initiatives.

The Alumni Relations Office at IITH aims to strengthen the Institute's bond with its 7000+ alumni across the globe. Our alumni are making meaningful contributions across industries-leading in technology, research, education, public service, and entrepreneurship. Many are professors, researchers, civil servants, and industry leaders. Through the alumni network, the student can find mentors, internship opportunities, excellence & scholarship programs, career guidance, and maybe even future co-founder!

Activities:

- Facilitating the Legacy Project by the alumni to support the Institute for the infrastructure development (Completed initiatives: Class of 2012 by building Tennis Court and Class of 2013 contributed for building the Recording Studio.
- · Organizing the mentoring initiatives for the current students and supporting the larger IITH community.
- · Engaging alumni through various Alumni Gettogethers, Meet and Greets (Both National and International), Reunions, Decennial Year celebrations and various alumni chapters.
- Creating opportunities by alumni to support students through scholarship programs that promote academic, research, and educational excellence by means of scholarship and Donor Awards.



The Office of Career Services (OCS) aims to augment placements, internships, and Pre-Placement Offers (PPOs) through a robust foundation of corporate relations, expanding opportunities for students across all programs.

The Office of Career Services (OCS) at IITH conducts a range of career-focused activities to support students in their placement journey. To enhance student readiness and bridge the gap between academics and industry expectations, thereby increasing placement outcomes. OCS regularly organizes knowledge-sharing sessions by professionals from reputed organizations and distinguished alumni.

Statistics:

- * Total number of Offers made: 712
- * Number of International offers made: 53
- * Number of companies participated: 358
- * Highest Package offered: Rs. 66.13 LPA
- * Average Package offered: Rs. 20.13LPA
- * Number of PPos: 130

Total number of Intern offers made: 407 *Highest Intern stipend: Rs. 19Lakhs per

- * Average Stipend: Rs. 80K
- * Number of International Intern offers: 15 * Summer Internships: 209
- * Semester Internships: 132
- * PG Internships:66



Corporate Relations visit: https://acr.iith.ac.in/

The Corporate Relations Office at IITH continues to drive strategic collaborations with industries, philanthropists and NGOs to strengthen the Institute's research, academic and societal impact (CSR initiatives) through:

- Building 40+ CSR collaborations, generating more than 8+ crore in funding for research, infrastructure and student initiatives.
- · Strengthening industry ties for joint research, prospective recruitment and establishing Centres of Excellence.
- · Attracting endowments for Chair Professorships and expanded scholarships, with a special focus on girl child support for hostel and mess fees.
- 30+ students benefiting directly through scholarships funded by alumni, corporates and NGOs.
- · Leveraged 100% tax exemption under Section 80G to secure major contributions for strategic projects.
- Leading CSR funding initiatives, excellence awards, and targeted fundraising campaigns to advance institutional growth.
- · Organized strategic events such as ESG forums to foster strong industry-academia collaborations and promote sustainable development initiatives.
- Attracting funding to establish renewable energy infrastructure, including campus solar farm, solar-powered parking and EV charging facilities.



The Public Relations Office at IITH plays a pivotal role in enhancing the Institute's visibility and outreach.

It actively manages communications across five major social media platforms, ensuring timely dissemination of updates, initiatives, and achievements.

The PR Office handles media relations by engaging with over 500 national and regional outlets to share institutional news.

It publishes key dossiers such as the

- · Institute Brochure
- · Annual Report
- · Calendar, and
- the quarterly e-newsletter KirIITH, each showcasing IITH's progress and

The office coordinates dynamic content for the Institute website and digital video walls across campus. In addition, the PR team documents and promotes research activities and institutional events through impactful videos, photography, and event coverage.

It also oversees content for national portals like the IIC Portal, ensuring alignment with innovation and outreach goals of IITH

International Relations Visit: https://ir.iith.ac.in/ Email ID: dean.ir@iith.ac.in

The Office of International Relations at IITH reflect the institute's vision and commitment to providing high-quality education without geographical boundaries, enhancing the diversity of its student body and forming strategic partnerships around the world.

- International Admissions and International Collaborations
- Coordinate international delegation visits to IITH
- Encourage, maintain and sustain relationships with foreign universities and build new partnerships
- Promote International admissions in neighbouring countries
- Promote international student exchanges (both inbound and outbound)

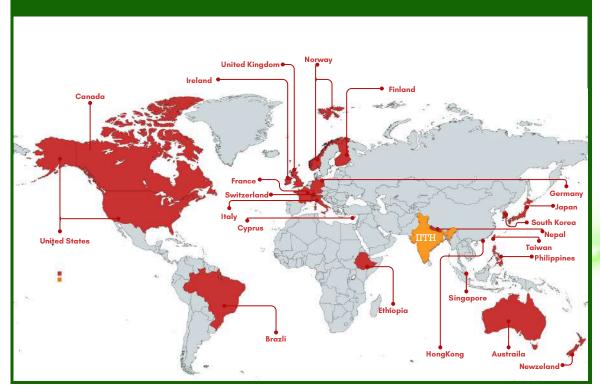
We are focused on building strong research collaborations with foreign universities.

To accomplish this, we envisage a 4-stage process:

- Faculty interactions (visits & workshops, video-conferencing, joint proposals, coauthored papers)
- Student exchanges (PhD and MS scholars to spend 3-12 months carrying out research at collaborators' laboratories)
- Joint supervision of research scholars, serving on doctoral and master committees
- Joint-degree programs (where sufficient sustainability and scalability of relations have been demonstrated)



Global Network of IITH



The International Relations Cell (IRC) is a student body working with the Office of International Relations (OIR). It works to promote the exchange of students, faculties, and ideas between IITH and its international partners and to establish the globalisation of IITH.

IITH boasts a strong and extensive global network, with over 120 Memoranda of Understanding (MoUs) established with leading academic institutions and renowned industries across the world.

These collaborations foster opportunities for joint research, faculty and student exchange, collaborative projects, and industry-driven innovation, enabling IITH to actively engage in knowledge sharing and contribute to advancements on a global scale.

International Relations

Visit: https://ir.iith.ac.in/ Email ID: dean.ir@iith.ac.in



Senior leaders from 15 US universities and IIE members visit to IITH to expand academic and research collaborations



Visit by Delegation from University of Magdeburg and German Institutes t IITH



Visit of a 26-member Business Delegation comprising Chiefs and Members of Japanese SMEs to IITH campus



MoU Signing Ceremony between IITH and Hamamatsu City



Kenyan Delegation visit to iTIC Incubator at IITH to Strengthen Innovation-Entrepreneurship ties through India-Kenya Innovation Nexus



An Indo-German initiative, "Heidelberg-Hyderabad Hub in Advanced Chemical Education" (H^3ACE) at IITH



Japan Academic day Celebrations at IITH



Deakin Day and additive Manufacturing Symposium at IITH

Awards & Recognitions

Faculty-Fellowships:

- Prof Chandra Shekhar Sharma (CHE): Elected as an Associate Fellow of INSA.
- Prof Mahendrakumar Madhavan (CE): Elected as a Fellow of the Institution of Structural Engineers (FIStructE), UK and Chartered Structural Engineer (CEng).
- · Prof Malla Reddy (CHY): Elected as a Fellow of the Indian Academy of Sciences (FASc).
- Prof Sai Santosh Kumar Raavi (PHY): Selected for JSPS Invitational Fellowship.
- · Prof K Siva Kumar (EE): Elected as a Fellow of the Indian National Academy of Engineering (INAE).
- · Prof Suryanarayana Jammalamadaka (PHY): Elected as a Fellow of the Royal Society of Chemistry (FRSC).

Faculty-Other Recognitions:

- Dr Muvvala Gopinath (MAE): Selected as INAE Young Associate (2024).
- Narasimha Mangadoddy(CHE): Received the National Geoscience Award from President of India.
- Dr Nithyanandan Kanagaraj (PHY): Awarded Senior Membership by the International Society for Optics and Photonics (SPIE).
- Dr Sandipan Ray (BT): Elected as the Vice President of the Indian Society for Chronobiology (InSC).
- Prof Kiran Kumar Kuchi (EE): Received the National Pandit Deendayal Upadhyaya Telecom Excellence Award.
- Prof Sushmee Badhulika (EE): Received The Applied Materials Innovation Challenge

Prof B S Murty, Prof Giridhar Madras, Prof C Krishna Mohan, Prof S Badhulka, Prof V N Balasubramanian, Dr P Sudarsanam, Prof Ch Subramanyam, Prof Kishalay Mitra, Prof Kirti Chandra Sahu, Prof Pinaki Prasad Bhattacharjee, Dr Falguni Pati, Prof G D Janaki Ram, Prof Sunil Kumar Maity, Dr Shantanu Desai, Prof Shiy G Singh, Dr Natte Kishore, Dr Mayur Vaidya, Dr P Suresh, Prof Vinayak Eswaran, Dr Archak Purkayastha, Prof M Narsimha and Dr Alok Kumar Pan. Are listed in the world's top 2% of researchers by Stanford University! 2024

Alumni Awards:

- Mr S Kanaparthi (EE): listed in the world's top 2% of researchers by Stanford University! -
- Mr Kumar Shaurav (LA): Appointed as an Assistant Professor at IIM Ranchi
- Dr Nitin Kumar (CE): Appointed as an Assistant Professor at IIT Patna
- Dr Debaditya Roy (CE): Appointed as an Assistant Professor at IIT Kharagpur
- Dr Anjishnu Choudhury (MAE): Appointed as an Assistant Professor at IIT Bombay
- Dr Sriram Bhyravarapu (CSE): Appointed as an Assistant Professor at IIT Guwahati
- Dr Suryasnata Tripathy (EE), Appointed as an Assistant Professor at IIT Ropar.
- Mr Rohit Dhondge (CE): Achieved AIR-1 from civil engineering branch in UPSC (ESE)-24
- Mr Abhishek Singh (CE): Cracked UPSC Civil Services Examination 2025 (AIR-78)
- Mr Shiva Ganesh Reddy (CE): Cracked UPSC Civil Services Examination 2025 (AIR-119) Mr Akash Srivastava (CE): Cracked UPSC Civil Services Examination 2025 (AIR-459)
- · Mr Rohit Ray Bansal (CE): Cracked UPSC Civil Services Examination 2025 (AIR- 486)
- Dr Devesh Nigam (LA): Received Prestigious Education Leadership Award

Alumni Excellence Awards:

- Dr Manohar Kakunuri (CHE): Excellence in Academics and Technology Development
- Dr S Sivaganesh (CE): Excellence in Academics and Technology Development

Student Recognitions:

- Dr Amarteia Kocherla (CE): Received the Marie Skłodowska-Curie Individual Fellowship Award.
- Mr Athul V Rajeev (BME): Best Paper Award at the International Conference ICBES.
- Mr Atul S Vivek (MAE): Selected as Editor's Suggestion in Physical Review Fluids (PRF).
- Mr Bhanu Ganesh Ganta (EE): Silver Medal for the Best Student Paper for his full conference paper titled "Feasibility Study and Economic Analysis of an Add-on Battery for Electric Vehicles" at the 2024 International Conference organized by the Asian Institute of Technology.
- Ms Bhavya Surendran V S (BT): Best Poster Presentation Award at ICABB.
- Ms Cherishma Mallavarapu (MAE): Best Presentation Award at 8th National Symposium on Shock Waves at IIT Kanpur.
- Mr Daideep Kumar Balusu (PHY): Best Poster Prize at AAPPS-DPP conference. Also received a prize at the ASILS-13 conference.
- Mr Hashim P (BME): Received the DAAD Kospie Fellowship in this cycle by submitting a joint proposal.
- Ms Kavita (BT): Best Poster Award at Cancer NEXT.
- Mr Kiran Kumar Garlapati (MSME & CHY): Best Poster Award at E2M.
- Mr Krishna Chaitanva Nuli (MSME): Best Poster Award during NMA-ATM.
- Mr Md Abul Hasanath (CE): Best Poster Award in an international conference 2024, Essen, Germany.
- Ms Monica Gunasingh (BME): Received the Best Oral Presentation Award at the 11th Annual Scientific Meeting of the Indian Chapter of the International Society of Magnetic Resonance in Medicine.
- Mr Mudavath Arun Kumar (CHY): Received the Best Oral Presentation Award at the "VALORIZATION".
- Mr Neeraj Balachandar, Mr Shriram Hari, Mr A. Padmaprabhan, and Mr Kevin D'Souza (MAE): Secured second place among Indian teams at the CIEDS-DRDO Swarm Rescue Challenge.
- Mr Nitesh Kumar Podh (BT): Best Poster Award (and fee waiver) at the International Chromosome Stability meeting at JNCASR.
- Mr Prayat Kumar Sahu (CHY): Received an RSC Analyst Poster Presentation Award at a conference entitled "DAE-BRNS Conference on Electrochemistry for Industry, Health, and Environment (EIHE)".
- Mr Ranjan Kumar Sahu (PHY): Best Poster Award during 68th DAE-Solid State Physics Symposium at BARC.
- Mr Sahil Dhiman (MAE): Best Poster Award at 30th International Conference on Processing of Advanced Materials.
- Mr Saibal Saha (BT): Received the 2nd Prize in Poster Presentation at the European Molecular Biology Organization (EMBO).
- Ms Sakshi Manekar (CHE): Received the Best Oral Presentation in DST-PURSE supported 24th National Symposium on Catalysis (CATSYMP).
- Mr Sandal Kotawala (PHY): Start-up 'Alfaleus' selected for MedTech Innovator APAC Accelerator.
- Mr Shubham Bhoi (CHY): Best Poster Award at SuWatE'.
- Mr Soumyaranjan Behera (CHY): Best Poster Award at SuWatE'.
- Mr Sriram H K (BME): Best Paper Award at International Conference ICBES.



Vision 2030 & Beyond



- 8000+ Students
- 500+ Faculty
- 25+ Departments/ Schools
- 20+ UG Programs
- 50+ PG Programs
- 20+ Online Programs
- 50+ CoEs
- Support 50+ Villages



- 20,000+ Publications
- 3,00,000+ Citations
- 2000+ PhD Scholars
- 300+ PhD Graduation a year
- 300 Patents a year
- 500 Cr Funding a year
- 500+ Startups
- 2000 Q1 Publications a year
- 30% of funding from industry



- Green Campus
- Energy-efficient Campus
- Modularity & Flexibility
- Digital Campus
- Master Plan for 20,000 Students



- Deeptech Innovations
- Promoting Excellence
- Nurturing Interdisciplinary Research
- Inspire inventions and Innovations
- · Locally Relevant Research
- Rural Development

Exclusive Facilities at IITH



Atom Probe Tomography (APT) is the first-of-its-kind facility in India. The LEAP 6000 XR incorporates key features from previous generations of the APT, while combining a deep UV laser pulse with a proven local electrode design for good yield and data quality.



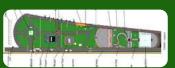
Brillouin light scattering (BLS) microscopy at IITH is the first-of-its-kind microscopy facility in India to investigate high-frequency (up to 500 GHz) magnons



Natural Language and Information Processing Lab. India's first-of-its-kind, indigenously developed, Artificial Intelligence (AI) based, government-funded, Multimodal Large Language Model (LLM) for Indian languages



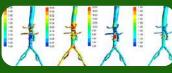
Nikon N-STORM Super-Resolution Imaging System with TIRF module and dual colour simultaneous imaging. First of its kind Single-Molecule Imaging facility in India for life-science research



India's first integrated autonomous navigation testbed featuring advanced facilities like Windshaper, Drona – a controlled drone navigation testing centre, rainfall simulators, a 500-meter 3- lane road track for high-speed testing, and a dedicated vertiport for urban air mobility research.



The Raindrop Research Facility (RRF) simulates atmospheric conditions from clouds to the ground to improve rainfall prediction. Using machine learning—based digital in-line holography, it studies raindrop shapes and sizes at different altitudes, providing data for accurate forecasting and region-specific rainfall models.



Cardiovascular & Complex Fluid Mechanics Lab, First to establish among IITs



Eranki Labs- First HIFU/FUS system to be Designed and Manufactured in India for Clinical and Veterinary use.



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