NIRF (INNOVATION) #3

NIRF NATIONAL-ENGINEERING #8

QS (GLOBAL - OVERALL) 681-690

NIRF (NATIONAL - OVERALL) #12

NIRF NATIONAL – RESEARCH #15

Contents

Director's Desk

Dear Friends,

I wish and hope that you are experiencing a joyful and wonderful time, with a thriving and enriching journey in the vibrant collaborative environment of IITH.

IITH has boosted its overall NIRF ranking to 12 from 14 of last year. Being ranked 8th among Engineering Institutes and 3rd in Innovation for the second consecutive year is a testament to our commitment to excellence, cutting-edge research and innovative ecosystem. In QS World Ranking-2025, IITH is placed at 681-690 in QS Global and is at 73 in the QS Asia rankings and has three of its departments (Physics, Computer Science & Engineering and Mechanical & Aerospace Engineering) listed in the subject rankings. In placements, IITH saw over 500 offers, including 43 international and 87 Pre-Placement offers. Despite the global economic slowdown, the institute received a good number of offers and industry participation, showcasing its dedication to academic excellence and industry connections.

Inspired by Hon'ble Prime Minister, Shri Narendra Modi Ji's advocacy of "Vasudhaiva Kutumbakam," which means "the world is one family," we have embraced this ancient principle by offering several courses on virtual platforms through Open to All Teaching (OAT) scheme. These courses aim to upskill and reskill everyone globally, fostering a seamless exchange of knowledge and ideas among students and faculty.

IITH offers a Joint Doctoral Program (JDP) with Swinburne University (Australia), Deakin University (Australia), Kathmandu University (Nepal), and National Tsing Hua University (Taiwan). 119 students visited various universities through Student Exchange programs, Internships, Jointly Supervised PhD and JDP programs. Programs like FIRST, ICCR, and Study in India (SII) facilitate admissions for foreign students at IITH.

We are committed to providing the best platform for core and auxiliary research, propelling the institute towards excellence in research and technology development. To nurture and propel the research and innovative spirit of our academic and research community, we have established a robust framework of guidelines and infrastructure.

As a result, IITH currently boasts over 11,400+ research publications with 170,000+ citations, and approximately ₹1270+ Cr research funding.

We are proud to announce that our faculty members are among the top 2% of world-renowned scientists, as published by Stanford University (SU) and Elsevier. It's inspiring to see our dedicated young faculty excelling and publishing in high-quality journals. The list is categorized into two groups: 11 faculty members recognized for their career-long research and 23 faculty members acknowledged for their research in 2023.

Our alumni make significant contributions across various fields and actively give back to the institute. Many hold faculty positions in prestigious institutions such as IITs, NITs, and IIMs, helping to shape future generations and advance education and research. IITH also has a foundation in the US to facilitate alumni contributions.

IITH fosters a vibrant Innovation and Entrepreneurial Ecosystem to support startups at various stages. At IITH, the entrepreneurial support for students ranges from BUILD (Bold and Unique Ideas Leading to Development) projects to a semester break with 6 credits to pursue their innovative ideas, to providing a diploma at the end of their second year of undergraduate studies, with an option to return to IITH and complete their degree within 5 years. Over the past six years, we have supported more than 190 startups, creating over 1,100 jobs, and generating more than ₹1,500 crore in revenue. We launched the IITH-Greenko BUILD program, aimed at supporting 75 student winners nationwide in their early idea validation journey through financial and mentoring assistance.

Passion and dedication of IITH community are the driving forces behind these impressive achievements. Our environment fosters innovation, supports continuous improvement, and helps us attain top rankings. 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)"
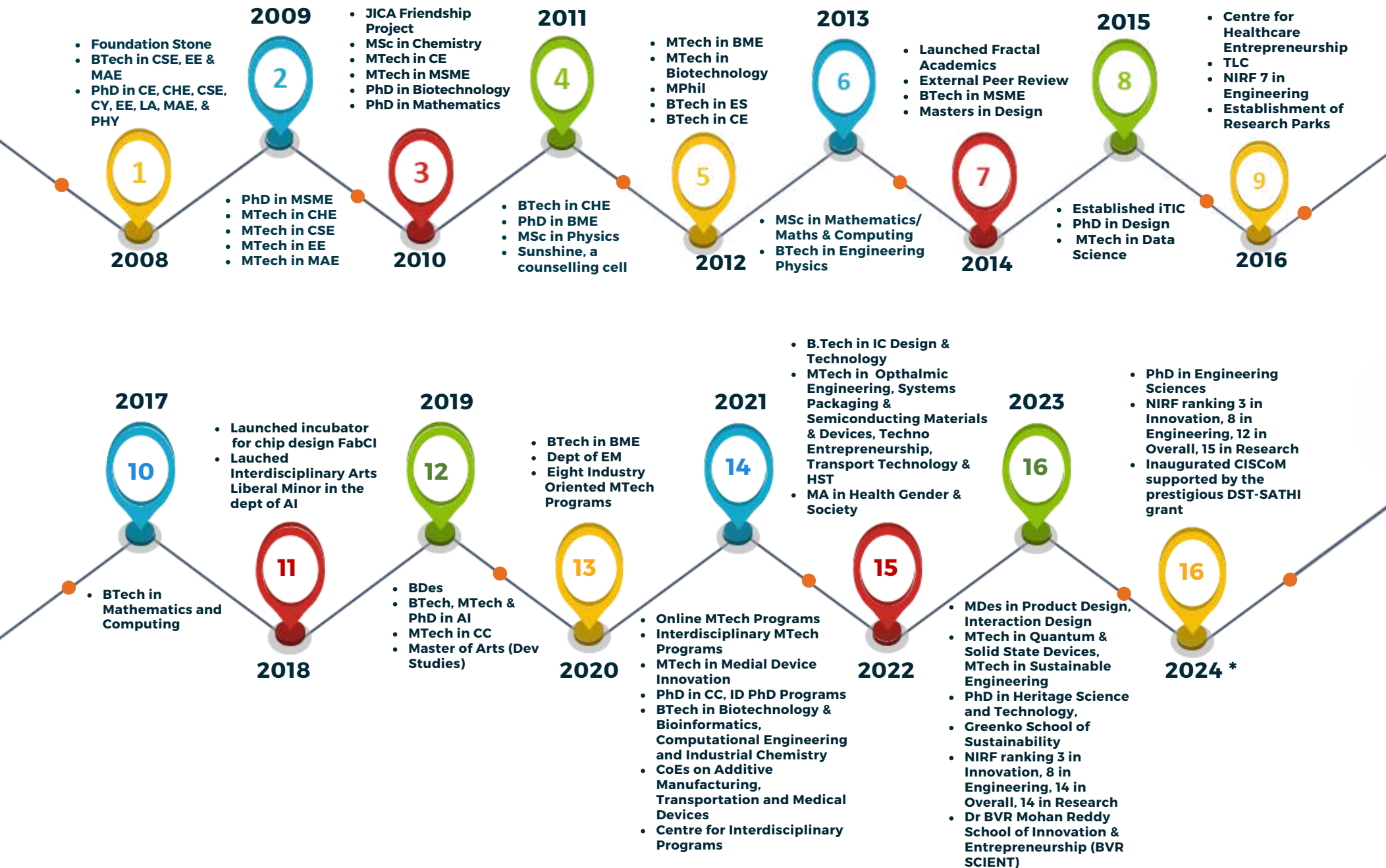
Prof B S Murty
Director, IIT Hyderabad

"Innovation distinguishes between a leader and a follower"
– Dr. A.P.J. Abdul Kalam

IITH's Journey so far

2008
- Foundation Stone
- BTech in CSE, EE & MAE
- PhD in CE, CHE, CSE, CY, EE, LA, MAE, & PHY

1

2009
2
- PhD in MSME
- MTech in CHE
- MTech in CSE
- MTech in EE
- MTech in MAE

2010
3
- JICA Friendship Project
- MSc in Chemistry
- MTech in CE
- MTech in MSME
- PhD in Biotechnology
- PhD in Mathematics

2011
4
- BTech in CHE
- PhD in BME
- MSc in Physics
- Sunshine, a counselling cell

2012
5
- MTech in BME
- MTech in Biotechnology
- MPhil
- BTech in ES
- BTech in CE

2013
6
- MSc in Mathematics/ Maths & Computing
- BTech in Engineering Physics

2014
7
- Launched Fractal Academics
- External Peer Review
- BTech in MSME
- Masters in Design

2015
8
- Established iTIC
- PhD in Design
- MTech in Data Science

2016
9
- Centre for Healthcare Entrepreneurship
- TLC
- NIRF 7 in Engineering
- Establishment of Research Parks

2017
10
- BTech in Mathematics and Computing

2018
11
- Launched incubator for chip design FabCI
- Lauched Interdisciplinary Arts Liberal Minor in the dept of AI

2019
12
- BDes
- BTech, MTech & PhD in AI
- MTech in CC
- Master of Arts (Dev Studies)

2020
13
- BTech in BME
- Dept of EM
- Eight Industry Oriented MTech Programs

2021
14
- Online MTech Programs
- Interdisciplinary MTech Programs
- MTech in Medial Device Innovation
- PhD in CC, ID PhD Programs
- BTech in Biotechnology & Bioinformatics, Computational Engineering and Industrial Chemistry
- CoEs on Additive Manufacturing, Transportation and Medical Devices
- Centre for Interdisciplinary Programs

2022
15
- B.Tech in IC Design & Technology
- MTech in Opthalmic Engineering, Systems Packaging & Semiconducting Materials & Devices, Techno Entrepreneurship, Transport Technology & HST
- MA in Health Gender & Society

2023
16
- MDes in Product Design, Interaction Design
- MTech in Quantum & Solid State Devices, MTech in Sustainable Engineering
- PhD in Heritage Science and Technology,
- Greenko School of Sustainability
- NIRF ranking 3 in Innovation, 8 in Engineering, 14 in Overall, 14 in Research
- Dr BVR Mohan Reddy School of Innovation & Entrepreneurship (BVR SCIENT)

2024 *
16
- PhD in Engineering Sciences
- NIRF ranking 3 in Innovation, 8 in Engineering, 12 in Overall, 15 in Research
- Inaugurated CISCoM supported by the prestigious DST-SATHI grant

*As on 25.09.2024

Core Values

Integrity
Academic Freedom
Excellence
Core Values
Transparency
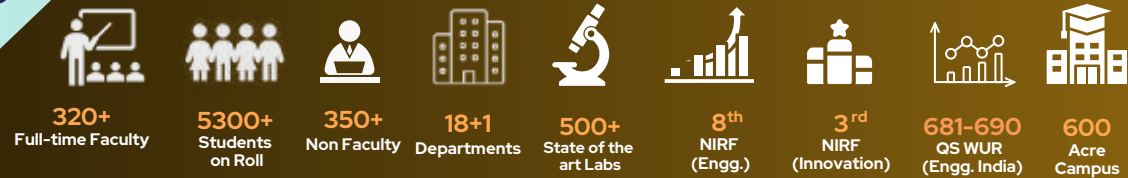Diversity of Ideas
Service to the Nation
Scientific Enquiry

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.

Academics

- 320+ Full-time Faculty
- 5300+ Students on Roll
- 350+ Non Faculty
- 18+1 Departments
- 500+ State of the art Labs
- 8th NIRF (Engg.)
- 3rd NIRF (Innovation)
- 681-690 QS WUR (Engg. India)
- 600 Acre Campus

Collaborations

- 35+ Laboratories
- 65+ Industries
- 140+ Academics
- 115+ National
- 130+ International
- 250+ Reg. companies for placement
- 25+ CSR Projects

Research

- 9 Centres of Excellence
- 4 Incubation Centres
- 4250+ Projects
- ₹ 1270+ Cr Research Funding
- 11400+ Publications Scopus Indexed
- 170000+ Citations
- 310+ Patents Filed
- 260+ Starts-ups 1500+ Cr Revenue
- 830+ PhD Graduates
- 1470+ Current PhD Scholars

* as on 25.09.2024

Academics & Research

Faculty
Total Faculty as on 25-09-2024: 324

Legend: Male, Female

Year	Male	Female
14-15	125	18
15-16	135	19
16-17	154	20
17-18	160	20
18-19	172	25
19-20	182	29
20-21	206	31
21-22	227	34
22-23	262	37
23-24	266	39
24-25*	273	51
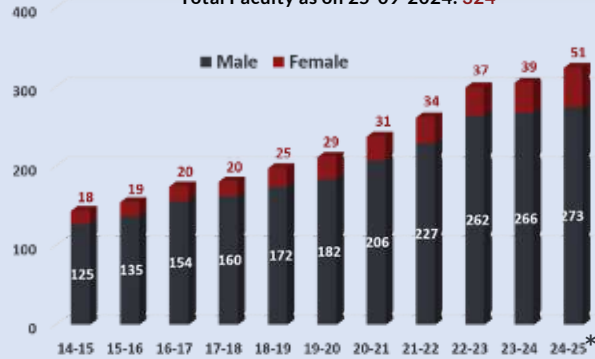
Project Funds (₹ in Cr)
Total Project Funds as on 25-09-2024: 1270 Cr

Legend: Research, Consultancy

Year	Research	Consultancy
14-15	45	1
15-16	48	2
16-17	46	2
17-18	103	4
18-19	58	3
19-20	73	5
20-21	76	7
21-22	69	25
22-23	117	16
23-24	226	22
24-25*	78	9
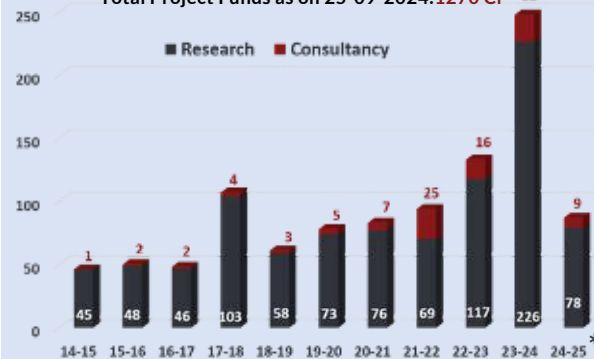
Patents
Total Patents filed as on 25-09-2024: 311

Year	Patents
2013	2
2014	12
2015	15
2016	19
2017	18
2018	21
2019	14
2020	21
2021	39
2022	24
2023	42
2024*	84
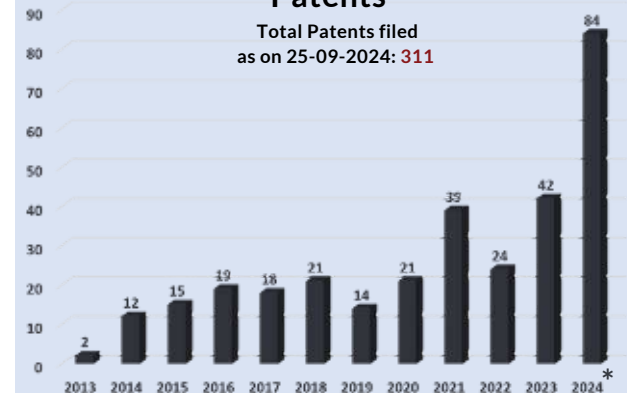
Publications
Total publications as on 25-09-2024: 11,410

Year	Publications
2012	177
2013	264
2014	414
2015	500
2016	534
2017	664
2018	1014
2019	1171
2020	1218
2021	1165
2022	1356
2023	1491
2024*	1275
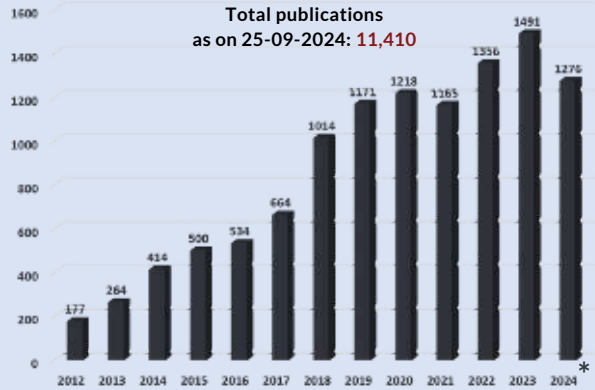
PhD Awarded
Total awardees as on 25-09-2024: 835

Year	Awardees
2013	3
2014	5
2015	34
2016	42
2017	40
2018	58
2019	69
2020	96
2021	119
2022	127
2023	110
2024	132
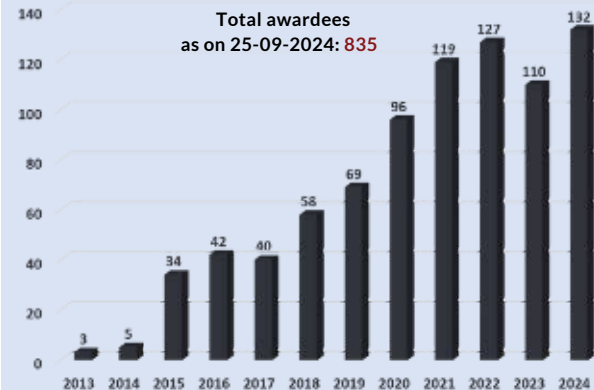
Students Intake
Total students intake for the year 2024 as on 25-09-2024: 1603

Legend: UG, PG, PhD

Year	UG	PG	PhD
14-15	208	273	153
15-16	203	263	134
16-17	242	302	169
17-18	288	332	172
18-19	291	350	160
19-20	322	365	159
20-21	434	505	356
21-22	487	675	310
22-23	509	601	287
23-24	601	712	330
24-25*	599	767	237

UG Students Intake

Dept	Intake
AI	34
BME	25
BT	23
CHE	43
CE	59
CSE	65
DES	24
EE	63
ES	38
MSME	34
Math	25
MAE	64
Ind Chy	22
EE-IC-D	24
Eng Phy	33
Comp Eng	25

PG Students Intake

Dept	Intake
AI & ML	28
BME	12
BT	20
CC	7
CHE	20
CHY	40
CE	45
CSE	63
DES	24
EE	58
LA	12
MSME	24
MATH	25
MAE	74
PHY	40
ID	67
OL	71
MP	9
TE	20
GS	30

PhD Students Intake

Dept	Intake
AI	7
BME	19
BT	26
CC	9
CHE	17
CHY	37
CE	26
CSE	14
DES	5
EE	17
EM	15
LA	20
MSME	23
MATH	7
MAE	29
PHY	33
ID	16
HST	9

Legend:

Abbr	Full form
AI	Artificial Intelligence
BME	Biomedical Engineering
BT	Biotechnology
CHE	Chemical Engineering
CE	Chemistry
CSE	Civil Engineering
ES	Engineering Science
MSME	Materials Science & Metallurgical Eng.
MATH	Mathematics
MAE	Mechanical & Aerospace Eng.
Ind Chy	Industrial Chemistry
EE-IC-D & T	EE-IC Design & Technology
Comp Eng	Computational Eng
AI & ML	Artificial Intelligence & Machine Learning
CC	Climate Change
CHY	Chemistry
LA	Liberal Arts
PHY	Physics
ID	Interdisciplinary
OL	Online
MP	Medical Physics
TE	Techno-Entrepreneurship
GS	Greenko School of Sustainability
EM	Entrepreneurship & Management
DES	Design
EE	Electrical Engineering
Eng Phy	Engineering Physics
HST	Heritage Science & Technology

*as on 25.09.2024

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5G & Next Generation Communication Technologies

Catalysis

Integrated Computational Engineering

Artificial Intelligence

Additive Manufacturing

Climate Change and Sustainability

Nano-Technology

Smart mobility

Rural Development

Energy

Sensors and Devices

Robotics

Transportation

Health Care

Waste to Wealth Management
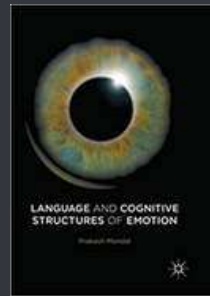
Bio-inspired Processes and Systems
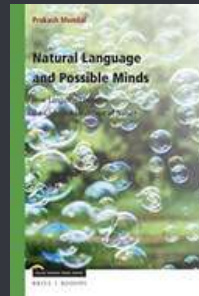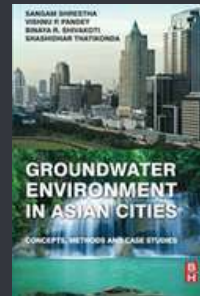
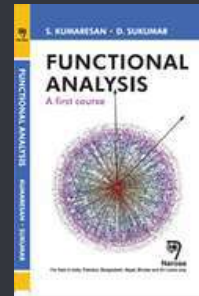Materials Characterization

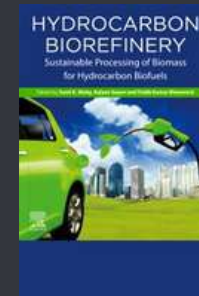# Books Published

Dr Prakash Mondal
Dept of LA

Dr Prakash Mondal
Dept of LA

Dr Prakash Mondal
Dept of LA

Prof T Shashidhar
Dept of CE

Dr Sukumar D
Dept of MATH

Prof Sunil K Maity
Dept of CHE

Dr Rekha Raja
Dept of AI

Dr Ankita Roy
Dept of Design
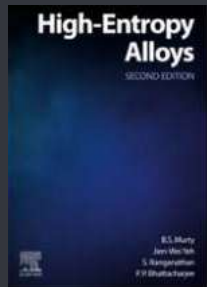
Prof B S Murty & Prof P P Bhattacharjee
Dept of MSME

Dr Chandan Bose
Dept of LA
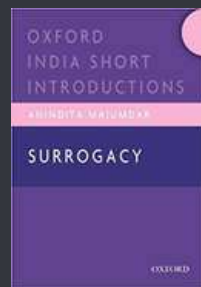
Dr Anindita Majumdar
Dept of LA

Dr Anindita Majumdar
Dept of LA
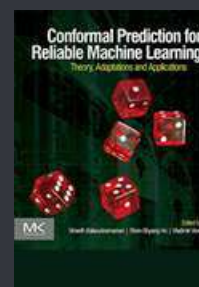
Dr Vineeth N B
Dept of CSE
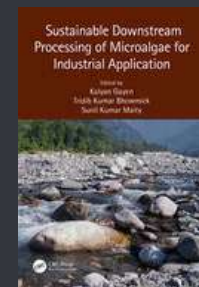
Prof Sunil K Maity
Dept of CHE

Dr Srirupa Chatterjee
Dept of LA

Prof Prem Pal
Dept of PHY

Dr Chandra Shekhar Sharma, Dept of CHE
Dr Mudrika Khandelwal,
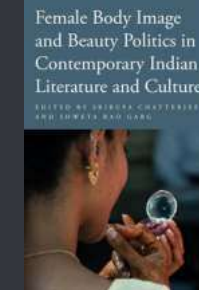Dept of MSME
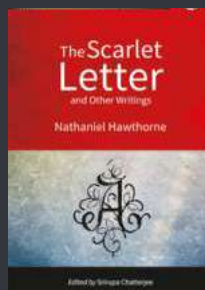
Dr Srirupa Chatterjee
Dept of LA

Dr Amrita Dutta
Dept of LA

Dr Falguni Pati
Dept of BME
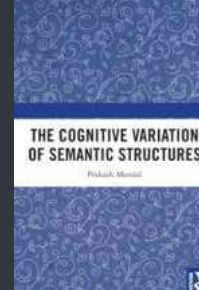
Dr Prakash Mondal
Dept of LA

Dr Srirupa Chatterjee
Dept of LA

Dr Deepak John Mathew
Dept of Design

Click here for More Publications

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 of Excellence :

- 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

Mechanical & Aerospace Engineering
- Mechanics and Design
- Integrated Design and Manufacturing
- Thermo-Fluid Engineering
- Aerospace Engineering

Physics
- Quantum & Solid State Devices

CIP (Center for Interdisciplinary Programs)
- Additive Manufacturing (With DRDO)
- Integrated Circuits and Microsystems Packaging
- Integrated Sensor System
- Medical Device Innovation (With AIG)
- Polymers and Biosystems Engineering
- Smart Mobility (With TIHAN)
- Ophthalmic Engineering (With LVPEI) Lightweighting 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

Distinguished Professors

Prof Chennupati Jagadish
Head of Semiconductor Optoelectronics
& Nanotechnology group,
Australian National University

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

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

Prof J N Reddy
Professor, Mechanical Engineering
Texas A&M University, USA

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

Dr Pulickel M Ajayan
Benjamin M & Mary Greenwood
Anderson Professor of Engineering
Rice University, USA

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

Prof Rohini M Godbole
Professor
IISc Bangalore, India

Prof Rao R Tummala
Distinguished & an Endowed Chair
Professor, Georgia Institute of
Technology, Atlanta, USA

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

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

Prof Seeram Ramakrishna
Mechanical Engineering
National University of Singapore

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

Deans

Prof Bharat Bhooshan Panigrahi
Dean (Academic)

Prof Prem Pal
Dean (Administration)

Prof Mahendrakumar Madhavan
Dean (Alumni & Corporate Relations)

Prof Kanchana V
Dean (Faculty)

Prof Surya Kumar S
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 K Venkatasubbaiah
Dean (Students)

Prof Debraj Bhattacharyya
Associate Dean (Planning)

*As on 25.09.2024

Artificial Intelligence

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

04 Full time Faculty

22 Affiliated Faculty

268 Publications

12 SRC Projects

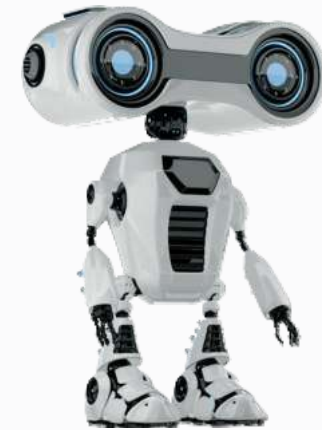**₹99**Cr Project Funding

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).

Thrust Areas

01	Explainable AI
02	AI and Health care
03	AI and Sustainable Development
04	Theoretical Machine Learning
05	Natural Language Processing and Computer Vision
06	Robotics

Artificial Intelligence

Highlights

- 3D bioprinted cornea for blinding corneal diseases
- Bioinspired gold coated phage nanosystem for anti-microbial and anticancer theranostics
- Enhances 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.

Major Facilities

- 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)

In vivo micro-CT scanner

Thrust Areas

01	Biomedical Imaging and Instrumentation
02	Biomechanics, Biomicrofluidics, and System Biology
03	Nanomedicine and Nanotechnology
04	Neuroscience,Neurotechnology, and Artificial Intelligence
05	Tissue Engineering and Regenerative Medicine
06	Lab on chip microfluidics for on-chip biology & biosensing

12 Full time Faculty

45 PhDs Graduated

487 Publications

90 SRC Projects

₹75 Cr Project Funding

Biomedical Engineering

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

17 Full time Faculty

30 PhDs Graduated

179 Publications

78 SRC Projects

₹33 Cr Project Funding

Gel Doc

Thrust Areas

01	Cell & Molecular Biology & Cell Signalling, Immunology
02	Biochemistry, Bioinformatics, & Biomarker Discovery
03	Structural Biology, DNA repair & RNA Biology
04	Chromosome dynamics, Gene Regulation, Advanced Imaging
05	Circadian Rhythm, Alternative Splicing, Innate Immunity
06	Protein Engineering, Cancer Genomics & Proteomics

Highlights

- Understanding the mechanism of DNA repair
- Characterization of E. coli Wzi protein for the treatment of multidrug-resistant Gram-negative bacterial
- Structure of DNA-binding protein from Trypanosoma causal agent of sleeping sickness
- Development of Zebrafish Model and Investigation of Pathological Mechanisms
- Understanding mechanism of HIV infection
- Discovery of chemicals to enhance the sperm motility
- Circadian regulations of neurological and metabolic disorders
- Remove 'Discovery of chemicals to enhance the sperm motility' since it's repeated

Major Facilities

- Ion Channel Assay System
- Bench-top Ultracentrifuge Optima MAX-XD
- Fast Protein Liquid Chromatography System
- Flow Cytometer
- HPLC (Analytical And Preparative)

Highlights

- Microfluidics for infectious disease diagnosis and treatment, cancer theranostics, photocatalysis and optical biosensors.
- Mathematical modeling for diagnosis of covid-19.
- Wind-AI: Efficient wind energy conversion to power under uncertain environment using AI.
- Optimization of lignin to chemicals process using Bayesian optimization.
- Developed GPU based 3D CFD codes and coupled CFD-DEM modelling for spherical & non-spherical particles to understand their interaction during the processing.
- Exploring Emerging Dual Carbon Battery Technology.
- Developed multiscale hybrid model to track mechano-optical coupling in plasmonic networks.

Major Facilities

- HORIBA LABRAM HR Evolution Confocal Raman Spectrometer,
- Optical Tweezers
- Small Angle X-RAY Scattering(SAXS)
- Maskless Lithography System
- Atomic Force Microscopy (AFM)
- Powder XRD

Thrust Areas

01	Energy Production, Conversion and Storage
02	Bio-engineering & Systems Biology
03	Advanced Materials, Poly Sc & Engg
04	Heterogeneous Catalysis, DFT, MD, Techno-Economic Analysis
05	Fluid Mechanics, Mineral Processing
06	Process Systems Engg AI/ML

HORIBA LABRAM HR Evolution Confocal, Raman Spectrometer

Chemical Engineering

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

22 Full time Faculty

68 PhDs Graduated

973 Publications

109 SRC Projects

₹42 Cr Project Funding

Chemistry

28 Full time Faculty

125 PhDs Graduated

1500 Publications

106 SRC Projects

₹41 Cr Project Funding

Highlights

- Developed a low-cost chemical route to recycle graphite
- LIBs. High performance 2.7 V LIHUCs.
- Supramolecular Engineering of battery materials
- Bioinspired Molecular Catalysts for Carbon Dioxide
- Reduction and nonthermal Plasma-Assisted Enhanced CO_2 Conversion
- Ring-Opening Polymerization of Cyclic Esters

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

Thrust Areas

01	Host-Guest Chemistry & Drug Discovery
02	Molecular Sensors & Co2 Activation
03	Pollution Abatement & High Performance Composites
04	Small Molecule Activation
05	Molecular Modelling & Organic Synthesis
06	Energy Conversion, Saving & Storage and Green Chemistry

Electron Spin Resonance Spectroscopy

Highlights

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

Major Facilities

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

TOC-TN Analyzer

Thrust Areas

01	Environmental Engineering
02	Hydraulics and Water Resources Engineering
03	Geotechnical Engineering
04	Structural Engineering
05	Transportation Engineering

27 Full time Faculty

100 PhDs Graduated

1023 Publications

1426 SRC Projects

₹300 Cr Project Funding

Civil Engineering

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

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

25 Full time Faculty

62 PhDs Graduated

865 Publications

93 SRC Projects

₹105 Cr Project Funding

650 TF High Performance Computational Facility

Thrust Areas

01 Theory
02 Networks
03 Machine Learning & Data Sciences
04 Compilers/Architecture
05 Formal Methods
06 Distributed Systems

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

Major Facilities

- Infrastructure Management with MAAS (Metal as a Service).
- Slurm, an in-house cluster management and job scheduling system
- Server and Switches, 500 TB Storage System, HPC Cluster
- Moodle (Modular Object-Oriented Dynamic Learning Environment)

Highlights

- Cave automatic virtual environment
- 3D printing
- Heritage virtual experiences
- Haptics and eye tracking analysis

Major Facilities

- Photography studio
- Animation studio
- Printing lab
- Clay studio
- Wood and metal workshop
- VR Cave/ AR VR lab
- Digital Heritage Lab
- Design for Sustainability lab

Thrust Areas

01 Participatory & Collaborative Design
02 Professional Ethics/Sustainability
03 Product Systems and Services
04 Design and Education
05 Wellness
06 Crowd Sourced Design

Haption 6DOF Haptic Device

Design

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

12 Full time Faculty

14 PhDs Graduated

300 Publications

13 SRC Projects

₹14 Cr Project Funding

Electrical Engineering

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

37 Full time Faculty
124 PhDs Graduated
1778 Publications
224 SRC Projects
₹385 Cr Project Funding

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)

Major Facilities

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

Thrust Areas

01	Communication
02	Nanoelectronics, Nano-bio Sensors, Nano-photonics
03	Multi-media Signal Processing & Speech
04	Cyber Physical Systems, VLSI/ULSI Design
05	Information and Coding Theory
06	Systems & Control Engg. Power Systems & Electronics, Green ICT

Plasma Asher

Thrust Areas

01	Entrepreneurship
02	Supply Chain Management
03	Innovation Management
04	HRM, Leadership, Operations Research, Strategy
05	Financial Management, Accounting
06	Rural Entrepreneurship, Marketing & Consumer Behaviour

Highlights

- Organized Webinar of The Indian tech Start-up Landscape Report 2023 in collaboration with iTIC, IIT
- Hyderabad and Zinnov (Brochure is attached and this can replace the image of Business Model
- Innovation Course on the left hand side)
- Conducted Residential Training Program for Senior Leadership of Indian Oil Corporation Limited on
- "Embracing ESG through Responsible Leadership"

Objective

The Department's main aim is to nurture entrepreneurial motivation and skills among young graduates and produce high-quality research in the areas of entrepreneurship and management. With a prime focus on entrepreneurship and management, the department has excellent potential to nurture young entrepreneurs who can contribute to the economic and social development of the country.

05 Full time Faculty
09 Publications
01 SRC Projects
₹ <1 Cr Project Funding

Entrepreneurship & Management

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

22 Full time Faculty
38 PhDs Graduated
396 Publications
69 SRC Projects
₹10 Cr Project Funding

Madhubani Paintings

Thrust Areas

01	Science & Tech, Urban Environments, Migration
02	Contemporary & Multiethnic American Fiction, Financial Economics
03	Popular Culture, Theoritical Linguistics, Learning & Memory Studies
04	Medical Anthropology, Kinship & Family, Resilience, Cultural Pshychology
05	The Twentieth Century, After Globalization & Media
06	Gender, Body Studies, Development Studies, Health Psychology

Highlights

- Services related to the ERIA Research Project
- Tackling Society's Grand Challenges: Approaches to Responsible Innovation in Science and Technology and Technology and Indo-Pacific Region
- Use of data for improved uptake of our services
- Impact of Landfills on Health
- Democratizing Delphi: towards more inclusive methodologies for assessing technologies for development
- Adolescent Sexual Health Education through Picture Books: Designing and Disseminating Picture Books on Sexual Health-Taking the Conversation to Children, Doctors, Teachers

Highlights

- Monotone Metric Spaces in Machine Learning
- Characterizations of local rings via homological dimensions of summands of syzygy modules
- Sign changes for the product of Fourier coefficients of Hilbert modular cusp forms
- Koszul Algebras and Diagonal Subalgebras
- The effect of heat source on non-Newtonian fluid flow through a horizontal porous bed
- Some New Variants of Bishop-Phelps-Bollobas Theorem for Spaces x^* and LipO(X)
- Invariant subspaces for a subclass of norm attaining operators
- Development of ERT Reconstruction Algorithms for Accurate Estimation of Phase Concentration in Multi-phase flows

Thrust Areas

01	Algebra & Number Theory
02	Analysis
03	Applied Mathematics and Computing
04	Statistics

Stream function pattern with point vortices on a curved torus

22 Full time Faculty
22 PhDs Graduated
240 Publications
83 SRC Projects
₹ 3 Cr Project Funding

Materials Science & Metallurgical Engg

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

21 Full time Faculty **54** PhDs Graduated **580** Publications **299** SRC Projects **₹132**Cr Project Funding

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.

Major Facilities

- 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

Thrust Areas

01 Novel Alloy Development for Defense, Aerospace, Automotive, and Naval Sectors
02 Design and Fabrication ofAdvanced Functional Materials and Devices
03 Multiscale Modeling of Materials and Defects
04 Sustainable Metallurgy
05 Advanced Manufacturing Techniques
06 Advanced Characterization Techniques

Thrust Areas

01 Smart Manufacturing
02 Vibrations and Acoustics
03 Experimental and Computational Mechanics
04 Multiphase Flows
05 Hydrogen Energy
06 Aerospace Engineering

Highlights

- Development of a low-frequency passive noise control sheet absorber
- Underwater shock simulator
- Double-Sided Incremental Forming for Large Components
- Started Minor in Robotics

Major Facilities

- Tekscan Tirescan System
- Polytec Micro System Analyzer
- High-Speed PIV
- Velocity And Scalar Diagnostics Laser System
- Phase Doppler Particle Analyzer

38 Full time Faculty **90** PhDs Graduated **612** Publications **261** SRC Projects **₹88**Cr Project Funding

Mechanical & Aerospace Engg

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

32 Full time Faculty

65 PhDs Graduated

1389 Publications

83 SRC Projects

₹32 Cr Project Funding

Vibrating Sample Magnetometer
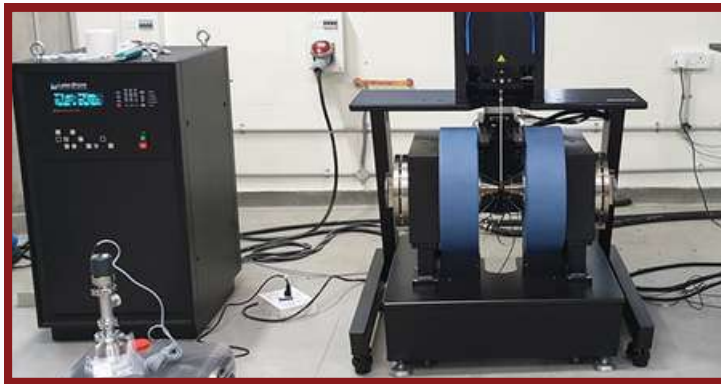
Thrust Areas

01	Condensed Matter Physics (CMP) - Experiment & Theory
02	Experimental High Energy Physics
03	Atomic, Molecular & Optical Physics (AMO) - Experiment & Theory
04	Noisy Intermediate Scale Quantum (NISQ) devices - Theory
05	Quantum Foundations, Information,Computation & CommunicationAstrophysics
	High Energy Physics (HEP) - Experiment and Theory

Highlights

- Finding fundamental limitations of the most widely used formalism for describing quantum devices.
- New Ultrafast fiber laser facility @ IITH. Development of next generation ultra fast fast laser sources for Biomedical applications. High Power Laser based Additive Manufacturing and Directed Energy applications.
- Observing and understanding black holes through NASA, ESA and ISRO space missions data.

Major Facilities

- Vibrating Sample Magnetometer
- MPMS
- XRD
- Terawatt Laser
- Sputtering system
- Photoluminescence Spectrometer
- Cryofree Optical Cryostat
- Brillouin Light Scattering
- Telescope

Highlights

- **Mechanical and Acoustic analysis of musical instruments, 3DfyMaps, 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, Digital Yoga Studios, Neuro-Biomechanics of Yoga and performing Arts, Computational social sciences - Mathematical analysis of Indic society, life and culture, Digital Heritage Documentation and Reconstruction, Structural Health Monitoring, AI for Sculpture, Heritage Clay Structures, Chemistry for Archaeology, Heritage Biomaterials Integrated Medicinal systems, Exploration of Panchadhatu/Ashtadhatu making, Foundational concepts in IKS**

Major Facilities

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

Thrust Areas

01	NEuro-biomechanics of Yoga and performing arts
02	Indic language processing
03	Heritage conservation and reconstruction
04	Integrated traditional medicinal systems
05	Acoustics of musical instruments
06	Archaeometry

Heritage Science & Technology

For more details, visit: *https://www.hst.iith.ac.in*

14 Affiliate Faculty

07 MTechs Graduated

02 Publications

03 SRC Projects

₹7Cr Project Funding

Climate Change

20 Affiliate Faculty

74 Publications

12 SRC Projects

₹3Cr Project Funding

Highlights

- The Department of Climate Change at the IITH attempts to explore climate change by integrating academic knowledge with practical knowledge bringing scientists, engineers, practitioners, and students together.
- The key is an understanding of the strong association between the basic climate sciences, the technology & engineering solutions, and the policy.
- We, at IITH, plan to be a leading institute in the synergy among these three key areas.
- This clearly highlights the need for multi-disciplinary courses.
- We plan to achieve this with a unique curriculum taking the help of IITH's fractal academics program.
- The curriculum involves core courses, elective courses, seminar series by the experts of various disciplines, focus group discussions, field visits, and research thesis.
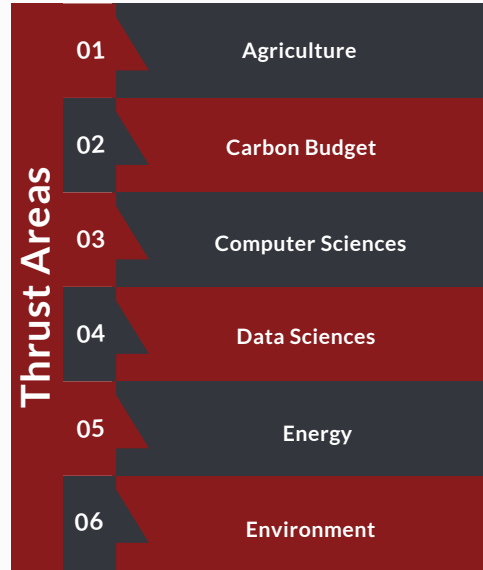
Thrust Areas

01	Agriculture
02	Carbon Budget
03	Computer Sciences
04	Data Sciences
05	Energy
06	Environment

Image Compression

Image Compression – A Trilogy (Past, Present and Future): A study by Sharath Chandra Sheripally
JPEG 28 years vs WebP 10 years vs AVIF 3 years

Thrust Areas

01	Real-World Engineering Problems
02	Multi-disciplinary Engineering Problems
03	System Integration
04	To cater the industry demand
05	To cater the Research demand
06	To apply acquired Math, Science and Engineering skills

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.

Major Facilities

- 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.

16 Affiliate Faculty
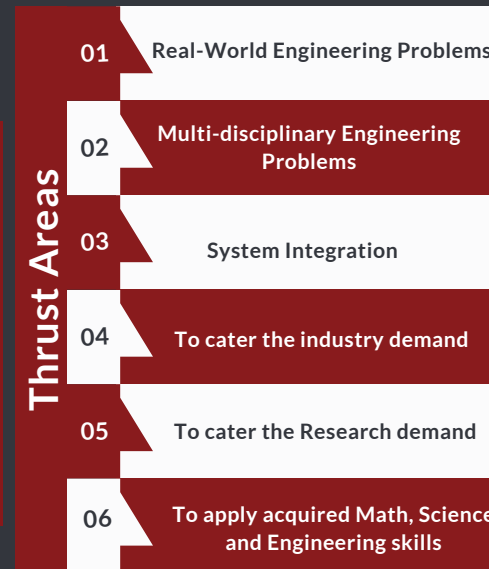
Engineering Science

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 IIT Hyderabad, have established the Dr. BVR Mohan Reddy School of Innovation and Entrepreneurship (BVR SCIENT) on the IIT Hyderabad 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.

Highlights

- Greenko Group and IIT Hyderabad 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 IIT Hyderabad.

ENERGY 01
Energy storage
Fuel cells
Hydrogen storage
Biofuels, etc.

RECYCLING 02
Waste to energy
Materials recycling
Circular economy, etc.

CLIMATE CHANGE MITIGATION 03
Carbon capture
Grid industries
Climate resilience, etc.

SUSTAINABLE HABITATS 04
Alternate materials
Affordable housing
Green infrastructure, etc.

AI TECH FOR SUSTAINABILITY 05
AI and big data technologies for sustainability

GREEN CHEMISTRY 06
Green energy compounds
Green materials, etc.

Greenko School of Sustainability

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

Center for Interdisciplinary Programs

96 No. of PG Students
57 No. of PhD Students

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

Centre for Interdisciplinary Programs serves as a bridge between traditional academic departments at IIT Hyderabad. Main goals of the center 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 'Centers of Excellence'

Highlights

- Services related to the ERIA Research Project
- Tackling Society's Grand Challenges: Approaches to Responsible Innovation in Science and Technology and Technology and Indo-Pacific Region
- Use of data for improved uptake of our services
- Impact of Landfills on Health
- Democratizing Delphi: towards more inclusive methodologies for assessing technologies for development
- Adolescent Sexual Health Education through Picture Books: Designing and Disseminating Picture Books on Sexual Health-Taking the Conversation to Children, Doctors, Teachers

Objective

The main objectives of CIP is
- 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.

PG Programs

- **Additive Manufacturing**
  3D Printing Technology
- **Integrated Sensor Systems**
  Combination of sensors with advanced processing, communication, and user interface technologies.
- **Polymers & Bio Systems Engineering**
  Expertise in the properties, processing, and performance of polymers and other materials used in healthcare
- **Smart Mobility**
  Autonomous Vehicles
  Sustainable Transportation
  This program is Collaborated with TiHAN, IIT Hyderabad.
- **Medical Device Innovation**
  This program is collaborated with Asian Institute of Gastroenterology (AIG) Hyderabad and an Incubator partner, Centre for Healthcare Entrepreneurship, IIT Hyderabad.
- **Ophthalmic Engineering**
  This program is offered through the combined expertise of LV Prasad Eye Institute and IITH.
- **Integrated Circuits and Microsystem Packaging**
  IC Packaging
  Electronics & Computing
- **Light weighting Engineering**
  Focus Areas -
  Design of Lightweight Structures
  Material Science
  Analytical Techniques
  Practical Application and Component Realization
  Safety and Durability
- **Medical Physics**
  This program is in collaboration with Basavatarakam Indo-American Cancer Hospital - Research Institute

Online PG Programs

- Integrated Computational Materials Engineering
- Electrical Vehicle Technology

Centre for Continuing Education
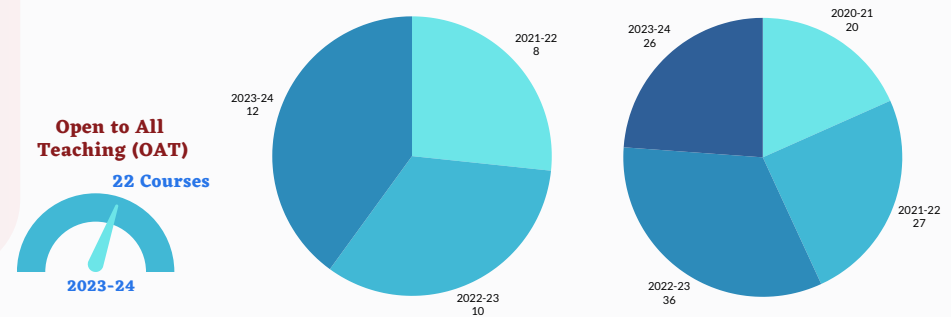
Scope and functions

- The Centre for Continuing Education (CCE) aims to conduct training programs to students, academicians, and working professionals across the country.
- To conduct all academic outreach activities like Conferences, Workshops, Certificate Courses, Symposia, Short-term courses, Training programs, and other similar activities of the Institute.
- To conduct certificate courses in collaboration with industry and academia designed to provide specialized expertise/skill development in diverse fields.
- To organize Faculty Development programs for faculty of various technical institutes of the country.
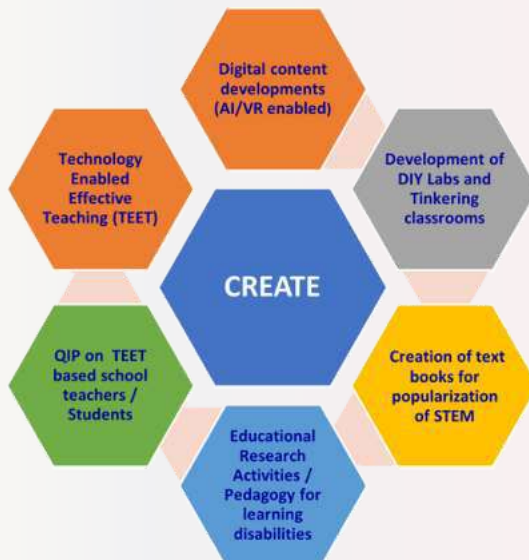
Programs and Facilities

- Open To all Teaching (OAT)
- NPTEL
- International/ National Conferences
- Workshops, Symposiums, Training Programs
- Certificate Programs
- Convention Centre Facilities :
  Auditoriums
  Seminar Rooms
  Conference Rooms
  VIP Lounges
  Comprehensive Support Services:
  Technical Expertise
  Event Coordination

Open to All Teaching (OAT)

22 Courses

2023-24

NPTEL Courses

2021-22
8

2023-24
12

2022-23
10

2020-21
20

2023-24
26

2021-22
27

2022-23
36

No. of Symposiums, Conferences, Workshops

Major Themes of CREATE

Scope and functions

- "Centre for Research in Education Assisted by TEchnology (CREATE)" is proposed with the concurrence of current challenges faced by the academia and with ideas of what future STEM education might turn into.
- The themes of the centre are enlisted, such that it addresses various facets of the challenges faced by 21st century academic institutes and IITH. The themes are deliberated and listed such that how an instructor can integrate themselves as a part of the learning activity of the students.
- In the process, integration of various technology into pedagogy becomes inevitable for the current and future problems.
- The centre will focus on effective utilization of technology tools for effecting teaching and learning at the same time give a right proportion of learning by making/doing.

CREATE

Centre for Research in Education Assisted by TEchnology

Centers of Excellence

Rural Development Centre

Rural Development Centre (RDC) at IITH was established in July 2020 with a vision to support Rural development initiatives of the Government through innovative technologies being developed at IITH.
To know more, visit: https://rdc.iith.ac.in/

IITH-DIA Centre

DRDO-IITH Research cell was established at IITH initially and this cell was converted to DRDO Industry Academia Center of Excellence (DIA-CoE) during 2022 and started working from April 2023 on 07 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)
To know more, visit: https://pr.iith.ac.in/pressrelease/DIAH2.pdf

Design Innovation Centre

Design Innovation Centre at IITH is engaged in Innovation through design and technology along with partnering institutions engaging with mutually beneficial innovation activities.
To know more, visit: http://dic.iith.ac.in/

Teaching Learning Centre

TLC activities of IITH is mainly focused on faculty development programs aiming at advanced pedagogy and teaching effectiveness in the faculty and to instigate curiosity and art of questioning among the children in learning fundamentals of science & technology..
To know more, visit: https://tlc.iith.ac.in/

DST NM-ICPS TiHAN

Dept of Science & Technology (DST) under National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS), GoI has sanctioned the prestigious Technology Innovation Hub to IITH in the technological vertical of Autonomous Navigation & Data Acquisition Systems (UAVs, ROVs, etc.).
To know more, visit: https://tihan.iith.ac.in/

Centre for Research & Innovation in AI, (क्रिया)

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

Centre of Excellence for Medical Devices (CoE ICMR)

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

E Cell

We at IITH's Entrepreneurship Cell believe in passion, hard effort, and an unquenchable drive for achievement. We are people who love nothing more than the thrill of coming up with ideas, working them out into businesses and experiencing the pleasure of watching it all come to fruition.
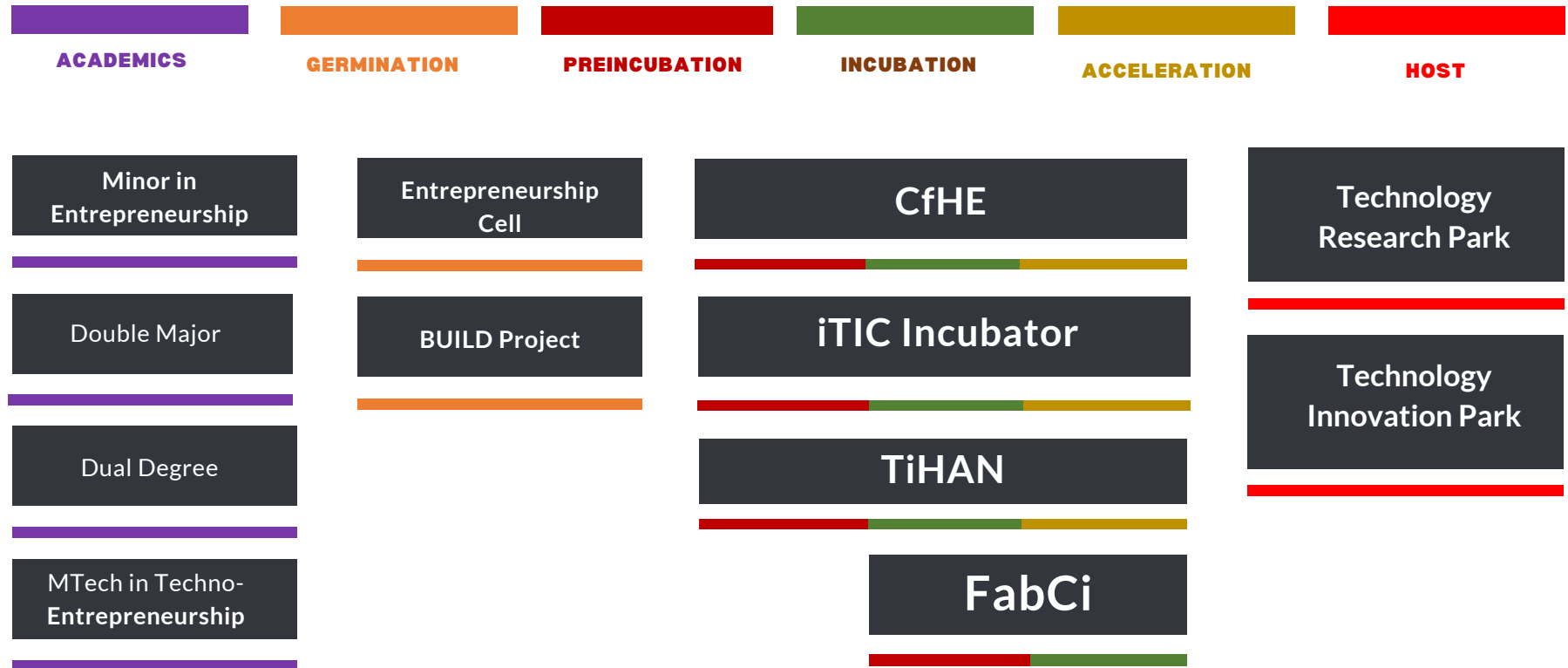To know more, visit: https://ecell.iith.ac.in/

Transportation Research and Innovation Hub (TRIHUB)

IITH inked an MoU with the National HighwaysAuthority of India (NHAI), Ministry of Road Transport and Highways, Govt. of India to establish a TRI HUB. This Centreof Excellence at IITH will work on contemporary and cutting-edge technologies for National Highwaysin India.
To know more, visit: https://trihub.iith.ac.in/Home.html

Innovation at IITH

IITH Entrepreneurship Ecosystem

ACADEMICS   GERMINATION   PREINCUBATION   INCUBATION   ACCELERATION   HOST

Minor in Entrepreneurship	Entrepreneurship Cell	CfHE	Technology Research Park
Double Major	BUILD Project	iTIC Incubator	Technology Innovation Park
Dual Degree		TiHAN	
MTech in Techno-Entrepreneurship		FabCi	

Center for Healthcare Entrepreneurship
For Details, Visit: Visit: https://cfhe.iith.ac.in/
i-TIC Foundation
For Details, Visit: Visit: https://i-tic.iith.ac.in/

NMICPS TiHAN Foundation
For Details, Visit:
 https://tihan.iith.ac.in/

Fabless Chip Design Incubator (FabCI)
For Details, Visit: Visit: http://fabci.iith.ac.in/
Technology Research Park
For Details, Visit: Visit: https://trp.iith.ac.in/

Relations

Alumni Relations

Alumni relations Office aims to nurture and strengthen the institute's bond with its alumni to support key strategic initiatives. These include setting up world-class research, academics and infrastructure in emerging areas of science and technology, improving faculty value proposition, strengthening the entrepreneurship ecosystem and contributing to society.

For all our national institutes of eminence, it is a well-known fact that the Alumni have always played a key role in building the institute and its reputation. Likewise, we at IIT Hyderabad have identified the Alumni Relations as one of the key pillars of our institute.

Activities
- Alumni Engagements
- Alumni Meet & Greet @ major cities
- Foster talks by alumni
- IITH annual alumni day
- IITH monthly digest to alumni
- IITH AA engagements with students
- IITH campus access facilities

Visit: https://acr.iith.ac.in/

International Relations

- 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 neighboring 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, co-authored papers)
- Student exchanges (PhD and MS scholars to spend 3-6 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)

Visit: https://ir.iith.ac.in/

Corporate Relations

Foster business engagements to conceptualize, develop & implement strategic initiatives. Regular meetings with Corporates to:

- Research collaboration & funding
- Prospective recruitment for the students
- Legacy projects funding – Alumni batches
- Excellence awards endowment by Alumni and Philanthropist
- Scholarships supported by alumni
- Engaging with corporates for CSR funding
- Fundraising campaign drives
- Scholarship for EWS funded by NGOs

OCS Activities

- Placements & Internship - augment the placement Internship & PPOs through the robust foundation of Corporate Relations
- Career Counselling to prepare students to make the right choice of career
- Knowledge-sharing sessions by Professionals from reputed organizations

Visit: https://ocs.iith.ac.in/

Public Relations

Public Relations Office promotes and upholds IITH reputation through strategic communication enabling comprehensive public engagement.

Facilitating a strong and comprehensive public resulting in higher student recruitment, industry liaison, funds for faculty research, greater visibility, and strategic investments

Activities
- Institute Publications (Monthly Highlights, Newsletter, Brochure, Annual Report, and Calender) and Communications
- Media Management and Public Relations
- Social Media Management
- Facilitating Photography/ Videography for Institute Research Videos and other Institute Events
- Institutional Ranking Coordination: NIRF, QS & ARIIA

Visit: https://pr.iith.ac.in/

General Council

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://gymkhana.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..

Sports Council

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, floodlit 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 and is a student council that helps take IITH to every individual in and 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 academic newsletter, placement newsletter with the guidance of different faculties, and PR Office of IITH.

Scitech Council

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.
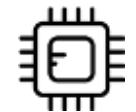
Mess Council

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 IITH. It strives to ensure that all the students have enjoyable and healthy meals at their second home.

Sunshine

Sunshine: The Counselling Cell

Since its inception on January 12, 2012, Sunshine- the counselling cell at IIT- H, has been committed to helping the student community. The dedicated team of Sunshine comprises of a Faculty in- Charge, three Psychological Counsellors, nineteen faculty representatives, twelve student heads, thirty two management team members and thirty three student mentors.

Campus Facilities

- **24X7 Hospital & Pharmacy**

- **Knowledge Resource Centre (Library)**

- **SBI, Canara, HDFC, and ICICI Banks on campus**

- **Recreation center**

- **Tinkerer's lab**

- **E-Cell**

- **Supermarket**

- **World class indoor and outdoor sports facilities**

- **Olympic size Swimming Pool**

- **Cultural amenities**

- **Post Office**

- **Open Air Theatre with 40x20 ft LED screen**

- **Cafeteria (Domino's, Subway, Barista, Amul and other outlets)**

- **Vending Machines**

- **Speciality Clinics**

- **Recording Studio**

KRC at a glance

- **RFID based Book Circulation System**
- **Search using Summon discovery tool**
- **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**

Book Scanner

Self Check-in/ Checkout Kiosk

Knowledge Resource Centre
IIT Hyderabad

Academic & Research Tools & Services

Access all subscribed resources at: https://identity.iith.ac.in/

Faculty-Fellowships

- Dr Gaurav Sharma (BT), Associate of the Indian Academy of Sciences (2023)
- Prof Mahendrakumar Madhavan (CE), Fellow of the Institution of Civil Engineers (ICE), London, UK
- Prof Mahendrakumar Madhavan (CE), Fellow of the American Society of Civil Engineers (ASCE), USA
- Dr Mudrika Khandelwal (MSME), INSA Associate Fellow (2023)
- Dr Prakash Chandra Mondal (LA), Fellow of the Royal Society of Arts (RSA) London
- Prof Rajakumara Eerappa (BT), Fellow of the Telangana Academy of Sciences (FTAS), 2023
- Prof Sai Santosh Kumar Raavi (PHY), Fellow of the Royal Society of Chemistry (FRSC)
- Prof Sai Santosh Kumar Raavi (PHY), Fellow of the Telangana Academy of Sciences (FTAS) for the year 2023 under the category of Physical Sciences
- Dr Sayantee Jana (MA), Fields Research Fellow at the Fields Institute for Research in Mathematical Sciences
- Dr Shourya Dutta Gupta (MSME), INAE Young Associate (2023)
- Prof Sivakumar (EE), elected as INAE Fellow (2023)
- Dr Sudarsanam Putla (CHY), Fellow of the Telangana Academy of Sciences (FTAS), 2023
- Prof Vineet Balasubramanian (CSE), elected as INSA Associate Fellow-2024 and INAE fellow

Faculty-Other Recognitions

- Prof Amirtham Rajagopal (CE), elected as an advisory editorial board member in the International Journal of Impact Engineering
- Dr Aravind Kumar Rengan (BME), Merk Young Scientist Award 2023 - Runner-Up in Biological Sciences
- Dr Aravind Kumar Rengan (BME), prestigious G D Naidu Award 2023
- Dr Atluri Avanthi (BT) Outstanding Women Researcher in Biofuels Award International Foundation, Chennai
- Dr Ashok Kamaraj (MSME), member of the Editorial Board of IIM Metal News Magazine
- Prof Ashok Kumar Pandey (MAE), elected as the Chair of the Technical Committee in Micromachines, IFToMM
- Prof Chandra Shekhar Sharma (CHE), elected as a member of the Editorial Board Member for an IOP Publishing journal Nano Express.
- Dr Chandra Sekhar Sharma has been elected as a Co-Chair of Gobal Young Academy (GYA) for the year 2024-25
- Prof C Malla Reddy (CHY), appointed as Co-Editors-in-Chief of CrystEngComm Journal
- Dr Digvijay S Pawar (CE), Bronze medal in the 14th South Zone Shooting Championship Rifle/Pistol (NR)
- Dr Digvijay S Pawar (CE) Networking Grant Award from "The Ademy of Medical Sciences" UK
- Dr Gangadharan Raju (MAE), Editorial Board Member of the ISSS Journal of Micro and Smart Systems.
- Dr Ganesh Sambhaji Ghalme (AI), A Bill & Melinda Gate Foundation Grant
- Prof Kanchana (PHY), Bronze medal from the Society of Materials Chemistry, (2023)
- Prof Kirti Chandra Sahu (CHE), Editorial Advisory Board of Langmuir
- Prof Kirti Chandra Sahu (CHE), Associate Editor of Industrial & Engineering Chemistry Research (American Chemical Society)

- Prof Kishalay Mitra has received an outstanding Reviewer Awards 2023 by IOP Publishing.
- Dr Lopamudra Giri has received an Award from the Royal Academy, Engineering, UK, (2024)
- Prof Mahendrakumar Madhavan (CE), Member of the Global Advisory Committee (GAC) of Construct steel
- Dr Mudrika Khandelwal (MSME) & Prof P Rajalakshmi (EE), selected for the 3rd Batch INSA-NCGG Leadership in Science & Technology (LEADS) Programme, Aimed at training scientists to become future leaders
- Dr Nagarajan Ganapathy (BME), Editorial board member for the prestigious "IEEE Transactions on Affective Computing" journal
- Dr Nagarajan Ganapathy(BME) received the Bill & Melinda Gate Foundation Grant
- Prof Narasimha Mangadoddy has been awarded with National Geo Science Award (2023).
- Prof Renu John (BME) Best Bioincubation Centre Exhibit.
- Dr Rupesh Ganpatrao Wandhare (EE), "SERB Technology Translation Award"
- Prof Sai Santosh Kumar Raavi (PHY), Associate Editor of Elsevier's journal (OPTICAL MATERIALS)
- Dr Sandipan Ray (BT), multi-national grant by Wellcome Trust, UK
- Dr Sandipan Ray (BT), elected as a member of the Executive Committee (EC) of the Indian Society for Chronobiology (InSC)
- Dr Sayantee Jana (MA), elected as a member of the Editorial Board of Statistica Neerlandica Journal
- Prof Shashidhar T and his research team's (CE), article "Pharmaceutical Pollution of the World's Rivers," has bagged the Cozzarelli Prize.
- Dr Shiva Ji (DES), Invitation from The Japan Science and Technology Agency (JST) to join Japan-Asia Youth Exchange Program in Science
- Dr Surendra Nadh Somala (CE), "Lunar-gravitational Wave Antenna" received funding from the European Space Agency for science activities on the Moon.
- Prof Sushmee Badulika (EE), Prof Kasturi Lal Chopra, Memorial Distinguished Lecture Award (2023)
- Prof Vandana Sharma (PHY), "Young Scientist Award" in The National Physicist Conclave - 2024 held at SRM University, Chennai
- Prof B S Murty (MSME), Prof Giridhar Madras (CHE), Prof Ch Subrahmanyam (CHY), Prof Vinayak Eswaran (MAE), Prof Kishalay Mitra (CHE), Prof K B S Rao (MSME), Prof Deepa (CHY), Prof KVL Subramaniam (CE), Prof Balasuramaniam Jayaram (MATH) Prof G D Janaki Ram (MSME) and Prof M.Narasimha (CHE) have been featured in the Stanford University (SU) and Elsevier top 2% of world-renowned scientists for career-long research (11 faculty).
- Prof B S Murty (MSME), Prof Giridhar Madras (CHE), Prof C Krishna Mohan (CSE), Dr Sushmee Badhulika (EE), Dr Vineeth N Basubramanian (CSE), Dr Sudarsanam Putla (CHY), Prof Ch Subramanyam (CHY), Prof Kishalay Mitra (CHE), Prof Kirti Chandra Sahu (CHE), Prof Pinaki Bhattacharjee (MSME), Dr Falguni Pati (BME), Prof G D Janaki Ram (MSME), Dr Sunil Kumar Maity (CHE), Dr Srinivasulu Kanaparthi (EE), Dr Shantanu Desai(PHY), Prof Shiv Govind Singh (EE), Dr Natte kishore (CHY), Dr Mayur Vaidya (MSME), Dr Suresh P (MSME), Prof Vinayak Eswaran (MAE), Dr Archak Purkayastha (PHY), Prof M Narasimha (CHE), Dr A.K.Pan (PHY) have been featured in the Stanford University (SU) and Elsevier top 2% of world-renowned scientists for single year research - 2023 (23 faculty).

Students Recognitions

- Ms Amisha (LA), won first prize at the 'India's Vision 2047' held at Administrative Staff College of India
- Ms Anamika Dixit (CHY), selected for the Future Research Talent Fellowship at the Australian National University
- Mr Aszad Alam (MSME), won the first Prize in the National Blog Writing competition at the India International Science Festival (IISF-2022) in 25+ category for the topic "Leveraging Science, Technology, & Innovations for an Atma Nirbhar Bharat"
- Mr Narnepati Krishna Chaitanya, Ms Jesna Fathima & Ms Debasmita Behera (CE), won the Mitacs Globalink Research Award
- Mr Parikshith Shashikumar & Ms Anushree Gupta (LA), selected for the Future Research Talent fellowship at the Australian National University
- Mr Pawas Dwivedi (EE), won the NCC- Overall Best Cadet of the Camp Award
- Mr Piyush Saklani (PHY), was awarded the Chanakya Post-graduate Fellowship from I-HUB Quantum Technology Foundation (I-HUB QTF)
- Mr Rishabh, 37th Inter Aquatics Meet 2023 (2 Gold,1 Silver,2 Bronze medals)
- Mr Barath, 37th Inter Aquatics Meet 2023 (02 Bronze medals)
- Mr Sandal Kotawala, won the 12th CavinKare-MMA ChinniKrishnan Award 2023 for the product Intelligent Vision Analyser (iVA)
- Mr Siddharth, 37th Inter Aquatics Meet 2023 (1 Gold, 1Silver, 3 Bronze medals)
- Mr MD Soif Ahmed (PHY), being selected for a Swiss Government Excellence Scholarship for the period of one year
- Dr Shanola S Sequeira (MA) student of Prof G Ramesh was selected for the KVRSS Award for 2024
- Ms Shreyayukta Chakraborty (BT), won the best Student Award at the "InSc School in Chronobiology 2023", at the Department of Zoology, NEHU, Shillong, organized by the Indian Society for Chronobiology
- Mr Srinivasan D (MSME), received The World Championship title in the 18th Version of Steel Challenge organized by the World Steel Association in London
- Ms Subhanjali (LA), won second prize at the 'India's Vision 2047' held at Administrative Staff College of India
- Mr Venkata Manikanta, 37th Inter Aquatics Meet 2023 (02 Bronze medals)
- Mr Vineet Gairola (LA), awarded the 2023 APS Student Grant by the Association for Psychological Science (APS)
- Mr Vineet Gairola (LA), received the Division 36 Social Justice Task Force Research Grant Award from The American Psychological Association
- RVBRN Aaseesh (EE), Utkarsh Doshi (EE), Lokesh Badisa (AI) & Atharv Ramesh Nair (EE), won 3rd prize in IEEE Signal Processing Society's recently held 2023 Video and Image Processing (VIP) cup
- Mr Apan Dinda, Ms Mrinmoyee Saha & Mr Pitambar Bagui (PHY), was awarded Chanakya Post-graduate Fellowship from I-HUB Quantum Technology Foundation(I-HUB QTF)

Alumni Excellence Awards

- Mr Aditya Aagare, Award for Promising Entrepreneur
- Dr Arghya Pal, Excellence in Academics and Technology Development
- Dr MD Azhar Ali, Excellence in Academics and Technology Development
- Mr Pramod Rangarajan, Distinguished Contribution to Institute Building
- Dr Rajesh Reddy Datla, Distinguished Contribution to Society and Nation-Building
- Mr Vishnu Vikyath G, Award for Promising Entrepreneur

Other Alumni Recognitions

- Dr Aswathi Velayathikode Anand (LA), selected as an Assistant Professor at NIT Raipur
- Dr Chalavadi Vishnu (CSE), selected as an Assistant Professor at IIT Tirupati
- Dr Deepak Bharadwaj PVP (MAE), selected as an Assistant Professor at NIPER Guwahati
- Mr Harsh Raj Gond (DES), IITH Alumni, received the recognitions at National & International Film Festivals
- Dr Hemanth Kumar Ch (CE), selected as as an Assistant Professor at IIT Dharwad
- Mr Jayasimha Reddy Ravula (EE), bagged the All India Rank-217 position in UPSC 2022
- Dr Konjengbam Anand (CSE), selected as an Assistant Professor at IIT Dharwad
- Dr Krishnarjun Banerjee (PHY), won the Prestigious Marie Curie Postdoctoral Position from the Queen Mary University of London
- Mr Kumar Shaurav (LA), selected as an Assistant Professor at IIM Ranchi
- Dr Narayanswamy Sake (MSME), IITH Alumni, was selected as an Assistant Professor at IIT BHU
- Dr Pragati Shrivastava (CSE), selected as an Assistant Professor at IIT Jammu
- Dr Priyanka Verma (CHY), selected as an Assistant Professor in the Department of Chemistry IIT Delhi
- Dr Sailaja Rajanala (CSE), selected as an Assistant Professor at Monash University, Australia
- Dr Sanjiv Kumar (LA), selected as an Assistant Professor at IIM Sirmaur, Himachal Pradesh & then IIT Kanpur
- Dr Santosh Kumar Varanasi (CHE), selected as an Assistant Professor at IIT Jodhpur
- Dr Sivaganesh Selvaraj (CE), selected as an Assistant Professor position at The Hong Kong Polytechnic University
- Dr Sudarshan Kottai (LA), selected as an Assistant Professor at IIT Palakkad
- Ms Sumana Som (DES), selected as an Assistant Professor at IIT Jodhpur
- Mr UmaMaheshwar Reddy B (MAE), bagged the All India Rank-270 position in UPSC 2022
- Ms Uma Harathi N (CV), bagged the All India Rank-3 position in UPSC 2022
- Mr Srinivasulu Kanaparthi have been featured in the Stanford University (SU) and Elsevier top 2% of world-renowned scientists his research in 2023

Vision 2030 & Beyond

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

- 15,000+ Publications
- 2,00,000 Citations
- 2000+ PhD Scholars
- 300+ PhD Graduation per year
- 300 Patents a year
- 500 Cr Funding a year
- 15+ CoEs, 500+ Startups
- Support 50+ Villages

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

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