भारतीय प्रौद्योगिकी संस्थान तिरुपति

IIT TIRUPATI

PLACEMENT BROCHURE

CAREER DEVELOPEMENT CENTER

IIT TIRUPATI

2025-2026

https://cdc.iittp.ac.in/

ABOUT IIT TIRUPATI

The Indian Institute of Technology Tirupati (IIT Tirupati), established in 2015 as the first among the third phase of IITs, is dedicated to becoming a leading centre of higher education with a global outlook and local relevance. Situated on a picturesque, eco-friendly 548-acre campus provided by the Government of Andhra Pradesh, IIT Tirupati stands out for its commitment to sustainable development and green infrastructure. Surrounded by hills and open spaces, the campus offers an inspiring environment that balances academic excellence, research, and extracurricular activities, nurturing students both professionally and personally. The institute currently houses nine departments across engineering, sciences, and humanities, offering a diverse array of undergraduate, postgraduate, and doctoral programs. IIT Tirupati's mission is to empower students to engage deeply with the social, scientific, and economic challenges of our times, with research and development at its core. With rapid growth in faculty, academic programs, and infrastructure, and a strong emphasis on holistic student development, IIT Tirupati has quickly gained national recognition, securing the 61th position in the NIRF India Rankings 2024 for engineering institutions.

"INNOVATION & INTEGRITY"

FROM DIRECTOR'S DESK

Welcome esteemed recruiters and industry partners to the Indian Institute of Technology Tirupati. Established in 2015, IIT Tirupati aims to lead in higher education with global impact. We offer B.Tech programs in Civil, Chemical, Computer Science,Engineering Physics, Electrical, and Mechanical Engineering, alongside M.Tech, MS, and PhD programs across disciplines, including M.Sc. programs in Physics, Chemistry, Mathematics & Statistics, and Public Policy, with a new branch in M.Sc. Mathematics this year.

These include advanced laboratories, classrooms, hostels, department buildings, and a sports complex operational since July 2022. Our faculty, combining dynamic scholars and seasoned academics from global institutions, drives pioneering research. Students gain practical experience through enriching summer internships, bridging theory with real-world applications.

At IIT Tirupati, we foster intellectual curiosity and creativity, evidenced by our students' achievements in national technical events and active participation in extracurricular activities. Rural engagement is integral, with NSS volunteers enhancing living standards and promoting government initiatives. Students also lead clubs focused on leadership and teamwork through adventure, photography, astronomy, music, chess, and social outreach. IIT Tirupati is dedicated to cultivating well-rounded individuals prepared to tackle global challenges with innovation and responsibility. We eagerly anticipate forging enduring partnerships with you.

" We Cordially invite you to IIT Tirupati for the on-campus placement process."

ABOUT CDC

Dr. Subbareddy Daggumati
Faculty Advisor Placements

Dr. Prashanth Vooka
Faculty Advisor Internships

Mr. Abhinay Irala
Training and Placement Officer

Mr. J. Prabhu Kiran
Training and Placement Officer
placement@iittp.ac.in

Prakhar Gupta
Student Placements Head

Harshith Reddy
Student Placements Head

The Career Development Centre (CDC) at IIT Tirupati is the institute's dedicated hub for placements, internships, and year-round career guidance. Serving as a vital interface between students and industry, the CDC is managed by a committed team of faculty, staff, and dynamic student coordinators who work collaboratively to connect with leading organizations in India and abroad. The CDC's core responsibilities include inviting reputed companies to campus for placements and internships, facilitating a smooth recruitment process, and arranging summer internships for B.Tech students as part of their academic requirements.
In addition, the CDC organizes regular career guidance sessions, skill development workshops, and information seminars to help students explore diverse career paths and prepare effectively for interviews and professional success.

OUR ALUMNI

V S S Kiran
CEO of Garudalytics

Rajendraprasad K
Founder, Stealth AI Startup

Noble Saji Mathews
Co-Founder @ Mayil

Siddhartha Thota
Founder of SphinxHire

Akash Dhasade
Doctoral Student at EPFL

Sudhanshu Singh
Software Engineer @ Stanford University

Shagun Mittal
Graduate Research Assistant at Purdue University

Sumukh Porwal
MS Robotics @ Worcester Polytechnic Institute

Jagannadha Mallik Pappu
PhD Student at the University of Texas at Arlington

Chandradithya Jonnalagadda
Masters in CS @ Brown University

WHY RECRUIT AT IITT ?

- IIT Tirupati is one of the most rapidly developing third-generation IITs.
- The campus offers modern labs, digital classrooms, and eco-friendly facilities, supporting advanced learning and innovation.
- We employ faculty from renowned institutes in India and abroad.
- With an excellent teacher-to-student ratio, students benefit from close interaction with faculty, gaining practical insights and engaging in research.
- The curriculum allows students to select electives, minors from various streams of science and engineering.
- Almost all undergraduates secure internships with leading companies and research organizations, ensuring practical exposure and workplace readiness.
- Holds 40+ MoUs with corporate firms like Kia, Nvidia Graphics Private Limited, and international universities such as Canada's University of Calgary, Texas A&M Engineering Experiment Station, and Nagaoka University of Technology (Japan), along with organizations like the Indian Navy and ISRO.
- Regular workshops and training sessions are conducted to enhance students' technical, professional, and soft skills, preparing them for diverse upcoming workplace challenges.
- Established with IISER Tirupati in 2020, CAMOST is India's first national center for atomic, molecular, and optical sciences, uniquely combining IIT and IISER expertise to lead in quantum and photonics research and host major scientific events.

Faculty to student ratio: 1:14	114 Distinguished Faculty	25.75 Crores of RnD funding	46 Sponsored Projects	UG:PG:PhD Ratio 32 : 12 : 10

PLACEMENT PROCEDURE

The placement season at IIT Tirupati will begin in the first week of September 2025 and will continue until the end of the 2025–26 academic session.

Invitation to Recruiters: The Career Development Centre (CDC) at IIT Tirupati invites recruiters to participate by sharing relevant company and job details.

01

02

Job Notification Form: Recruiters register on the online CDC web portal by creating an account and filling out the online Job Notification Form (JNF) with complete job profile details.

Pre-Placement Talk (Optional): If the recruiter is interested in conducting a Pre-Placement Talk (PPT), a request can be submitted along with the preferred dates.

03

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Student Application Process: The Job Notification Form is made available to all eligible students online. Students apply to the job profiles through the portal.

On-Campus Placement Process: The CDC office coordinates and informs recruiters of their allotted interview dates. Recruiters visit the campus and conduct the selection process.

05

06

Result Declaration: Upon completion of the process, the recruiter is required to submit the final list of selected candidates, along with a waitlist (if applicable), to the CDC office.

The CDC office informs the recruiters of the dates for the on-campus placement process. Recruiters visit the campus on allotted dates and conduct the selection process.

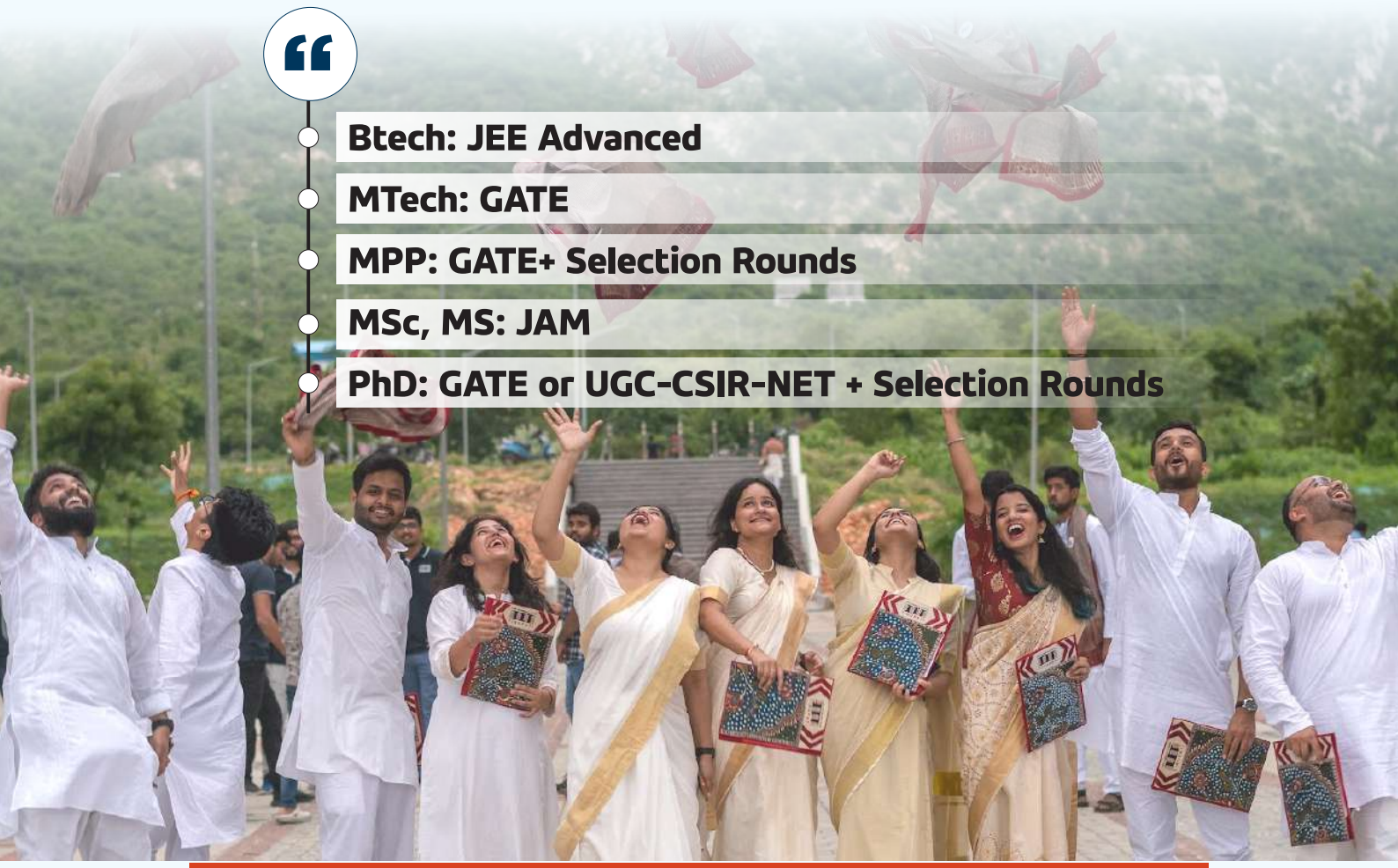
07

08

The recruiter is required to submit the list of selected and waitlisted (if desired) students to the CDC office soon after the completion of the selection process.

ADMISSION PROCESS

Admission to the Indian Institutes of Technology (IITs) is highly competitive, with only a select group of exceptionally talented and motivated students earning a place each year. The rigorous, multi-stage selection process ensures that those admitted exemplify academic excellence, determination, and the ability to thrive in one of the country's most demanding and dynamic learning environments.



- **Btech: JEE Advanced**
- **MTech: GATE**
- **MPP: GATE+ Selection Rounds**
- **MSc, MS: JAM**
- **PhD: GATE or UGC-CSIR-NET + Selection Rounds**

We Currently offer Two Types Of Internship Programmes :

- **Summer Internships**

B.Tech 2027 Graduating
(Between 6th sem and 7th sem, minimum 8 weeks)

6 months Internship [minimum 24 weeks]

B.Tech 2026 Graduating

- Chemical Engineering: July - December 2025
- Electrical Engineering, Computer Science Engineering, Mechanical Engineering, Chemical Engineering: January–June 2026

- **B.Tech 2027 Graduating**
  - All Branches: July–December 2026
- **Postgraduate (PG) Students :** Subject to department approval

ACADEMIC PROGRAMMES

MAJORS

B.Tech

- Civil & Environmental Engineering
- Chemical Engineering
- Computer Science and Engineering
- Electrical Engineering
- Mechanical Engineering

M.Tech

- Computer Science and Engineering
- Chemical Engineering
- Civil & Environmental Engineering
  - Structural Engineering
  - Transportation and Infrastructure Engineering
  - Environmental and Water Resources Engineering
  - Geotechnical Engineering
- Mechanical Engineering
  - Design and Manufacturing
  - Thermal Engineering and Energy Systems
- Electrical Engineering
  - Signal Processing and Communication
  - Microelectronics & VLSI
  - RF and Microwave Engineering

M.Sc

- Mathematics and Statistics
- Chemistry
- Physics

MS

- Civil & Environmental Engineering
- Chemical Engineering
- Electrical Engineering
- Mechanical Engineering
- Computer Science and Engineering

MPP

- Humanities and Social Sciences

PhD

Engineering

- Civil & Environmental Engineering
- Chemical Engineering
- Electrical Engineering
- Mechanical Engineering
- Computer Science and Engineering

Science

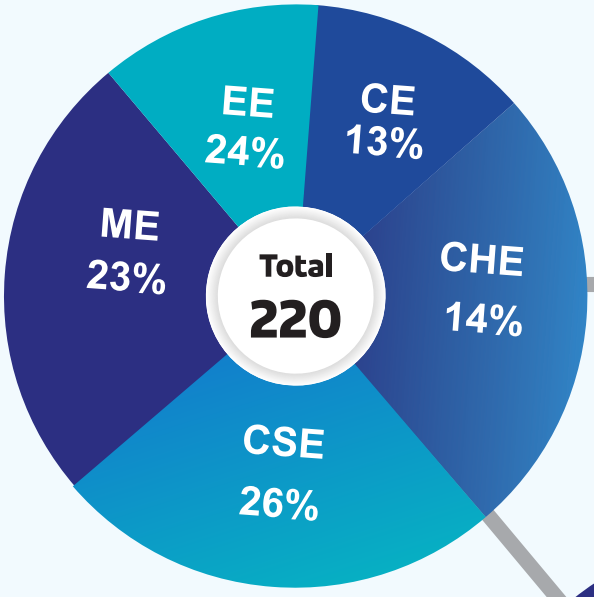
- Chemistry
- Mathematics and Statistics
- Physics
- Humanities and Social Sciences

MINORS

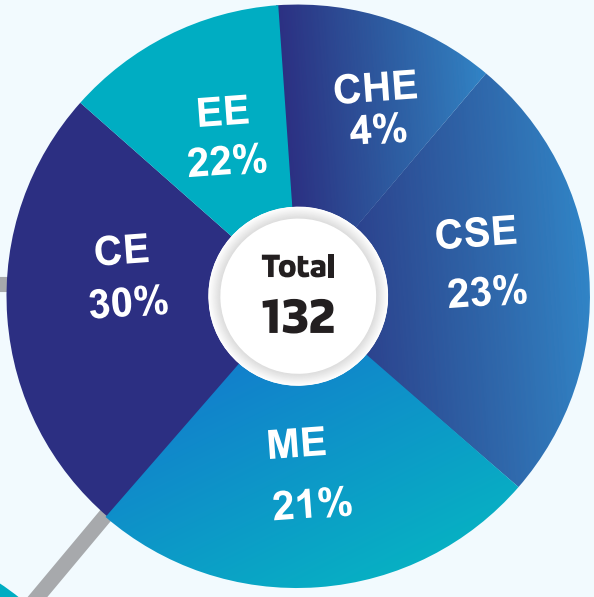
- Artificial Intelligence
- Communication Technologies
- Computational Learning Methods
- Robotics and Autonomous Systems
- Additive Manufacturing
- Green and Renewable Energy
- Environmental Management
- Literature
- Economics
- Management
- Public Policy
- Statistics

DEMOGRAPHY OF DISCIPLINES

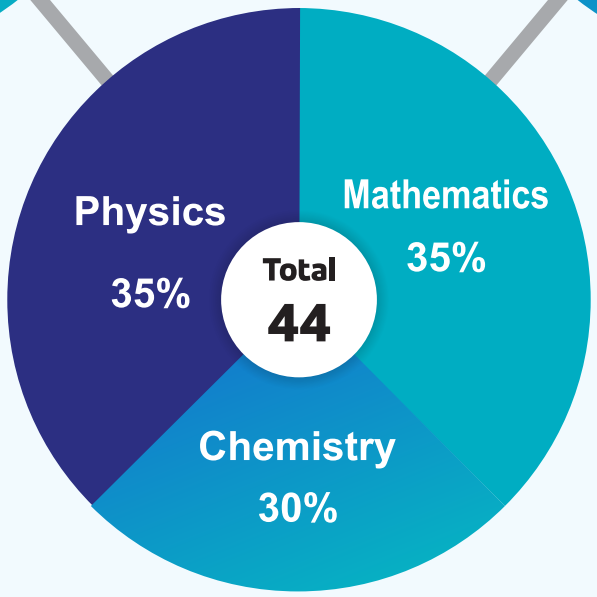
B.Tech



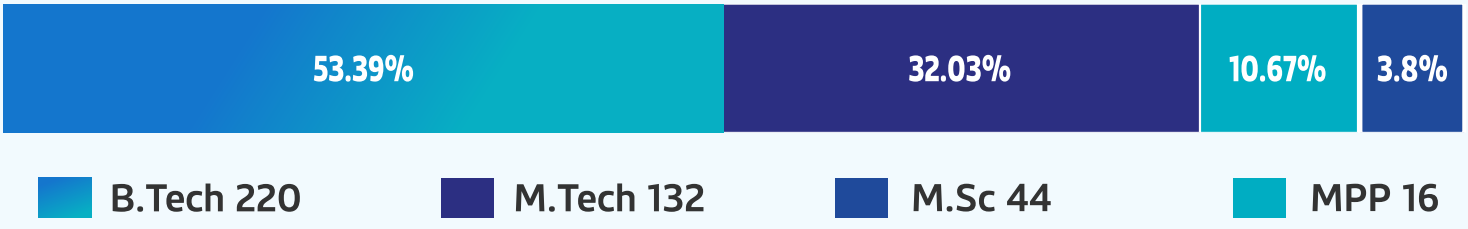
M.Tech



M.Sc



Total



As MS and PhD programmes are not strictly time-bound, the number of graduating students may vary each year and cannot be precisely estimated in advance.

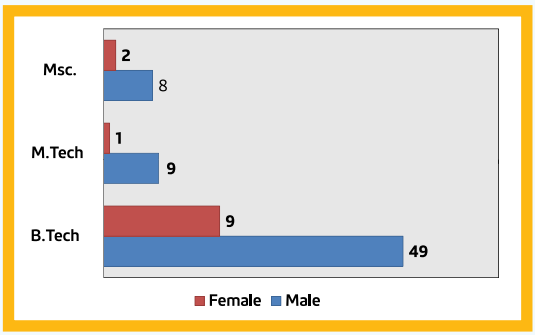
COMPUTER SCIENCE AND ENGINEERING (CSE)

About Department:

The Department of Computer Science and Engineering (CSE) at IIT Tirupati distinguishes itself through a strong focus on hands-on learning, interdisciplinary research, and active industry collaboration. With programs spanning B.Tech, M.Tech (Data Science and Systems), MS (Research), and Ph.D., the department combines rigorous academics with real world, project based courses.

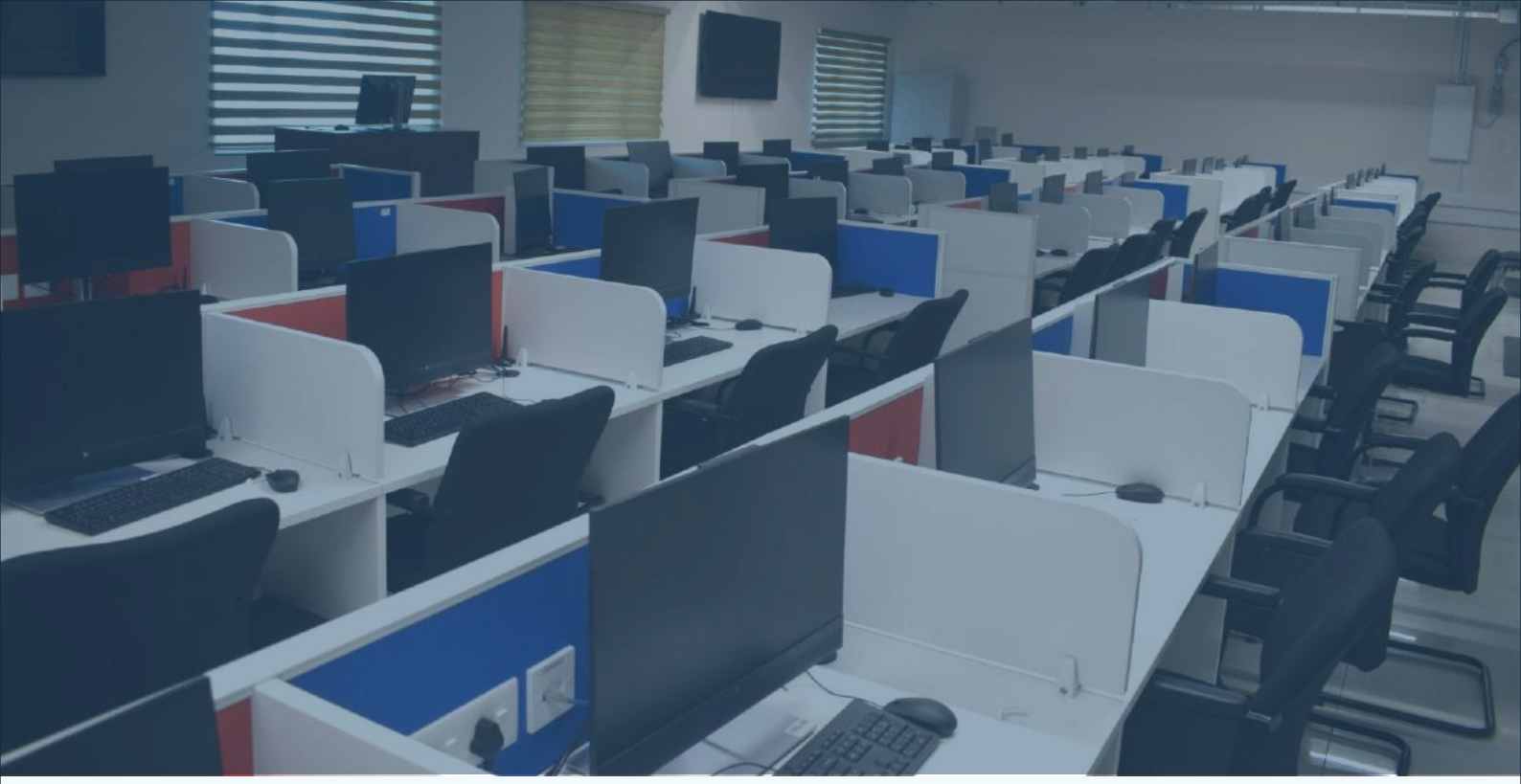
The faculty many with international experience and research funding from organizations such as DST, ISRO, and Accenture Labs create a dynamic and innovative academic environment.

Facilities



- **Computer Labs:**
  Intel i7 CPUs, 16 GB RAM, 1 TB SSD, dual-boot (Windows/Linux), 1 Gbps LAN & Wi-Fi
- **Cloud Infrastructure:**
  VM Cluster with 220 cores, 2.5 TB RAM, and 40 TB storage; VMs with up to 32 virtual CPUs, 32 GB RAM, and 1 TB storage
- **HPC Infrastructure (Lotus):**
  24 compute nodes + 2 GPU nodes with a combined capacity of 576 cores, 2 TB RAM (52 TFlops)
- **GPU HPC Cluster (Orchid):**
  204 cores, 1.5 TB RAM, with 12 NVIDIA GTX 1080Ti (11 GB) and 8 NVIDIA Tesla P100 GPUs (12 GB)
- **Software Access:**
  Access to 25 licensed software tools for academic and research use

Project Duration: 6 Months [UG] 1 Year [PG]



Labs Available:

- Computer Systems and Design Lab
- Software Engineering Lab
- Computer Networks Lab
- Operating Systems Lab
- Compiler Design Lab
- Intelligent Systems Laboratory
- Advanced Programming Lab
- Data Structures and Algorithms Lab
- Computer Organization Lab
- Digital Systems Lab

AREAS OF RESEARCH

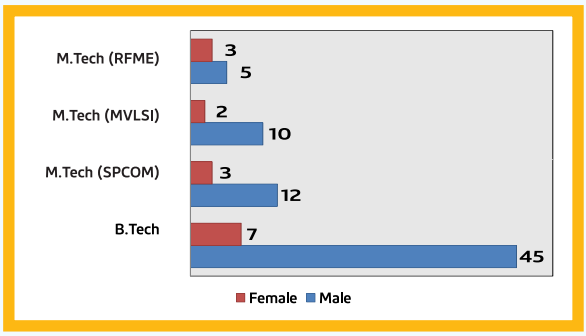
1. AI for software engineering / Software engineering for AI
2. Computer Vision and Deep Learning
3. Vision Language Models
4. Large Language Models
5. Reinforcement Learning
6. Parallel Computing on Graph Algorithms
7. AI Accelerators
8. Deep Learning Architecture for Real-time Analysis in Drones
9. Machine Learning Algorithms & Applications
10. Computational Complexity

ELECTRICAL ENGINEERING

About Department:

The Department of Electrical Engineering at IIT Tirupati offers a rigorous four-year B.Tech program, along with three specialized M.Tech programs in Signal Processing & Communication (SPCOM), Microelectronics & VLSI (MVLSI), and Radio Frequency & Microwave Engineering (RFME). Emphasizing hands-on learning, industry collaboration, and cutting-edge research, the department prepares its graduates to excel in both academia and industry. Faculty and students have made notable research contributions, publishing a total of 14 journal articles—8 in IEEE journals and 6 in other reputed publications.

Facilities



- 5G Lab: Next-gen cellular R&D with advanced test beds
- Spectrum Analyzers & Vector Signal Generators
- Device Simulation Lab: Semiconductor/device modeling & circuit simulation
- Power Electronics Lab: EV charging, resonant converters, advanced motor drives
- Nanoelectronics Lab (est. 2023): Nanoscale device research & fabrication
- Power Systems Lab: Converter, drive & power systems experimentation
- Smart Grid Lab (est. 2022): Smart-grid algorithm validation
- RF & Microwave Engineering Lab (est. 2023): High-frequency circuit design & testing
- Advanced RF CAD Tool Suite: Simulation & antenna design
- Device Characterization & Nanoelectronics
- Signal Processing & Computer Vision Lab: DSP, ML & real-time vision projects
- VLSI & Embedded Systems Lab: FPGA, analog/digital VLSI CAD suite
- Wireless Communication & Networking Lab (est. 2019): Modern wireless protocol R&D

Project Duration: 6 Months [UG], 1 Year [PG]

Areas of Research (M.Tech & Ph.D.)

- Advanced Signal Processing & Communication Systems
- High-speed Analog, Mixed-signal & RF/mm-wave Circuit Design
- Nanoelectronics & Semiconductor Device Physics
- Power Electronics, Drives & Smart-grid Technologies
- Embedded Systems & VLSI Design
- Machine Learning for Signal Inference & Computer Vision
- Wireless Communication & Networking Protocols

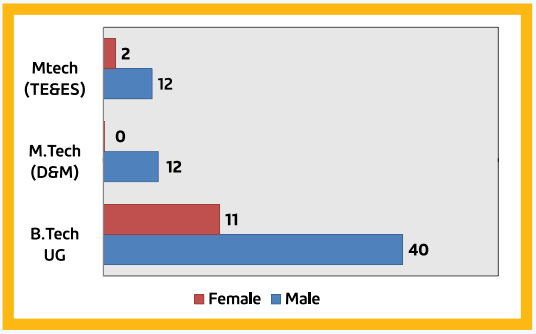
MECHANICAL ENGINEERING

About Department:

The Department of Mechanical Engineering at IIT Tirupati is home to 13 full-time faculty members, 12 staff, and a vibrant student community across undergraduate, postgraduate, and doctoral programs. The department's faculty are widely recognized for their achievements, including Dr. Madan Mohan A's prestigious Chevening Research, Science, and Innovation Leadership Fellowship at Oxford University; Dr. Govind Narayan Sahu's Best Paper Award at COPEN 13; and editorial appointments held by Prof. Muthukumar Palanisamy and Prof. Mamilla Ravi Sankar in top international journals. Additionally, Dr. Ajay Kumar has been honored with the Chandran Menon Memorial Award for Applied Research and Innovative Technology. With annual research funding exceeding 60 million, supported by agencies such as SERB, DST, NRB, DRDO, and IMPRINT, the department leads cutting-edge research and continually updates its curriculum to reflect evolving industry trends and technological advancements.

Facilities

- Central Workshop with Manual Injection Moulding,
- Welding Simulator, Electro-Pneumatic & Hydraulic Training Kits, ESAB 400 A Arc Welding Transformer
- Machine Tools Lab: 3D Printer, CNC Wire-Cut EDM
- Thirteen state-of-the-art instructional and research laboratories



Labs Available (BTech & MTech)

- Metallurgy Laboratory
- Metrology Laboratory
- Computation Laboratory
- Applied Mechanics Laboratory
- Advanced Materials Manufacturing & Tribology Laboratory
- Machine Tools Laboratory
- Makers Lab
- Field Robotics Lab
- Vibrations Laboratory
- Applied Thermal Engineering Laboratory
- 5G Lab (for control & automation research)
- Control & Automation Lab
- Device Simulation Lab
- Electrical Drives Lab
- Fluids and Thermal laboratory
- CFD LAB
- IC engines lab
- Design of Fluid-Thermal Equipment

** additional shared labs listed under Mechanical research collaborations

Project Duration: 6 Months [UG], 1 Year [PG]

Workshop Facilities

- Manual Injection Moulding Machine
- Welding Simulator
- Electro-Pneumatic Training Kit
- Hydraulic Training Kit
- ESAB 400 A Arc Welding Transformer

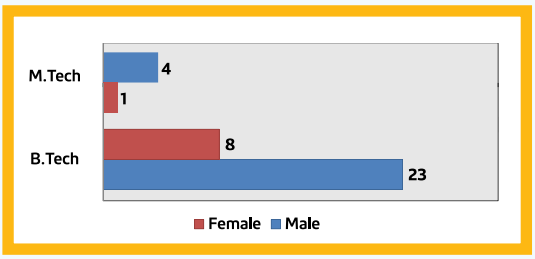
Areas of Research

- Advanced Manufacturing: Welding & Additive Manufacturing, Machining & Micro-Nano Finishing, Casting, Metrology
- Advanced Welding: Tandem GMAW, SAW CFD Modelling, Friction Stir Welding, Dissimilar Metal Joining
- Fluid & Thermal Sciences: Energy & Hydrogen Storage, Sprays & Combustion, Renewable Fluid Technologies
- Advanced Casting: Foundry 4.0 (Stir, Squeeze, Vacuum, Induction Melting, Simulation)
- Advanced Metrology: Form-error Algorithms, CMM & Contour Testers, 3D Scanning
- Solid Mechanics: Automotive Dynamics & Vibrations, Computational Solid Mechanics, Biomechanics, Composite Materials
- Mathematical modeling of fluid flow, Computational fluid dynamics
- Inverse Heat Transfer, Microchannel Heat Transfer
- Porous Medium combustion, Carbon-less Fuels for Transportation
- Wind energy, Thermal energy storage, Hydrogen storage in metal hydrides
- IC engines, Spray dynamics, Wave Hydrodynamics
- Bio fluid dynamics ,Fluid Structure Interaction, Multiphase flows

CHEMICAL ENGINEERING

About Department:

The Department of Chemical Engineering at IIT Tirupati is distinguished by its academic excellence, research achievements, and strong industry engagement. With an annual intake of 37 B.Tech students and 15 M.Tech students, the department is supported by a highly qualified faculty team holding PhDs from premier national and international institutions. The department specializes in key areas such as energy and environmental sciences, food process engineering, microfluidics, nanobiotechnology, and process optimization. Notable accomplishments include students being awarded the prestigious Prime Minister's Research Fellowship, selection for the Khorana Program for Scholars, and doctoral students receiving sponsorship from industry partners such as Sanitech Engineers Pvt. Ltd., APIT, and Turf Pearl. Faculty and students are actively involved in research projects funded by organizations like DST and SERB, while state-of-the-art laboratory facilities support high-impact research and industry collaboration. The department is committed to preparing graduates to become leaders in chemical engineering, research, and innovation.



Facilities

- GC-MS (Gas Chromatography–Mass Spectrometry
- HPLC (High Performance Liquid Chromatography)
- GPC (Gel Permeation Chromatography)
- TGA-DSC (Thermogravimetric Analysis–Differential Scanning Calorimetry)
- Microscopy (Optical / Fluorescence / Electron)
- Particle Size Analyser – DLS (Dynamic Light Scattering)
- BET Pore Size Analyzer (Brunauer–Emmett–Teller)
- Force Tensiometer / Optical Tensiometer
- Electrochemical Workstation
- Freeze Drier (Lyophilizer)

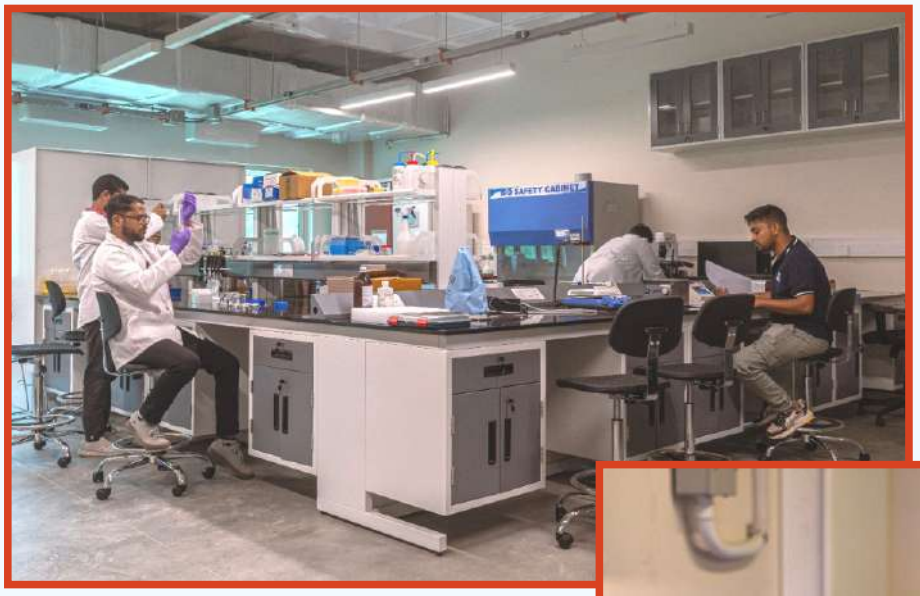
Research Oriented Tools

- Nano-ITC (Isothermal Titration Calorimetry at nano scale)
- MicroPIV (Micro Particle Image Velocimetry)
- Forward Osmosis and Reverse Osmosis Membrane Setup
- Spray Drier

Project Duration: 6 Months [UG], 1 Year [PG]

Labs

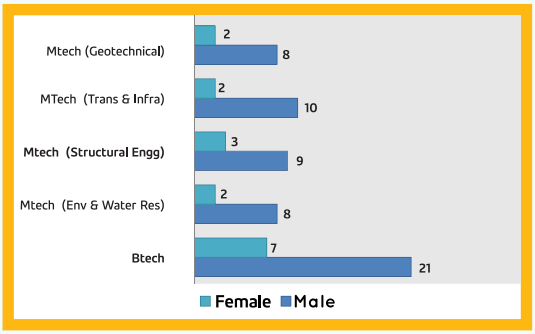
- Reynolds Laboratory for Microfluidics and Particle Mechanics
- McCabe Laboratory for Separation Processes
- Levenspiel Laboratory for Reaction Engineering
- Sargent Laboratory for Process Systems Engineering
- Nyquist Laboratory for Process Control and Automation
- Einstein Space for Research Scholars
- Langmuir Laboratory for Nanoporous Materials
- Thiele Laboratory for Catalysis
- Nicolas Laboratory for Food Technology
- Fleming Laboratory for Bioprocess Engineering
- Brunauer-Emmett-Teller Laboratory for Characterization of Materials
- Prandtl and Joule Laboratory for Thermal Transport and Energy Technology



CIVIL & ENVIRONMENTAL ENGINEERING

About Department:

The Department of Civil & Environmental Engineering offers a comprehensive B.Tech curriculum that spans core civil engineering disciplines, including Structural Analysis, Geotechnical Engineering, Environmental Engineering, and Transportation Planning. The department also offers four specialized M.Tech programs in Environmental & Water Resources Engineering, Structural Engineering, Transportation & Infrastructure Engineering, and Geotechnical Engineering. Faculty members are actively engaged in rigorous teaching, cutting-edge research, and industry-collaborative projects, supported by advanced laboratory facilities and competitive external research grants.



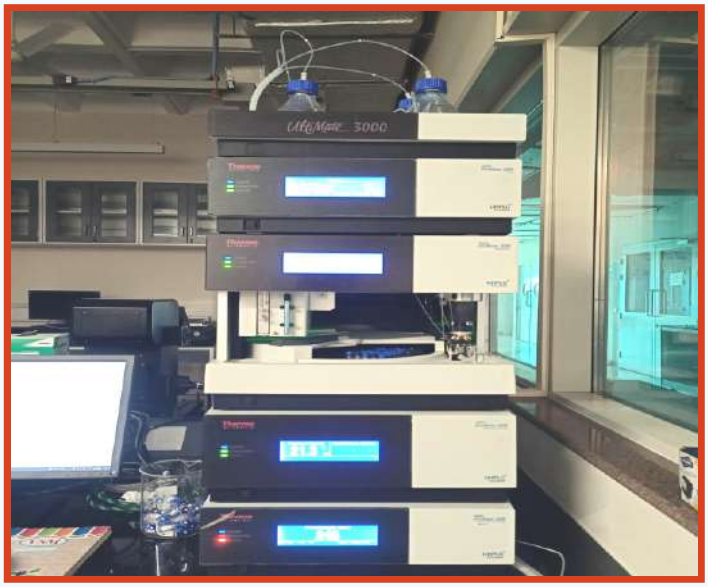
Facilities

- **Environmental Engineering Lab:** GCMS, Ion Chromatography, HPLC, UV-VIS, Fluorescence Spectrophotometer, High-Volume & Respirable Dust Samplers
- **Structural Engineering Labs:** Advanced Structural Engineering, Cement & Concrete Testing, Non-Destructive Testing, Building Materials
- **Transportation Lab:** DTS-30 Dynamic Testing System, ITFT, Pressure Aging Vessel, SuperPave Mix Design System, MAPSmart Research Cluster
- **Geotechnical Labs:** Advanced Soil Mechanics, Ground Improvement & Geosynthetics, Large-Scale Soil Testing, Geo-Environment Lab, Large-Scale Triaxial & Pull-Out Testing, MASW (24 channel seismograph)
- **Central Workshop & Support Labs:** Surveying, Drawing (Engineering & Building), Computational Engineering, Hydro-Informatics
- **Software & Virtual Infrastructure Access:**
  - **GIS & Mapping:** QGIS, ArcGIS
  - **Hydrology & Water Modeling:** WEST, FEFLOW, MIKE SHE, HEC-RAS, HEC-ResSim, GMS (MODFLOW), EPANET
  - **Structural & Civil Analysis:** MIDAS, ETABS, STAAD Pro, ANSYS, ABAQUS, Revit, AutoCAD
  - **Geotechnical & Pavement Design:** GeoStudio 2018 R2, GeoStudio 2019 R2, PLAXIS 2D, Rocscience, KENPAVE
  - **Traffic & Infrastructure Simulation:** SUMO, VISSIM, MovSim

Project Duration: 1 Year

Labs Available

- Building Materials Lab
- Transportation Engineering Lab
- Geosynthetics Lab
- Surveying Lab
- Structural Engineering Lab
- Hydraulics & Environmental Engineering Lab
- Advanced Structural Engineering Lab
- Computational Engineering Lab
- Engineering Drawing & Building Drawing Labs
- New: Hydro-Informatics Lab



Areas of Research (M.Tech & Ph.D.)

- Environmental & Water Resources Engineering: Remote Sensing & GIS, Synthetic Aperture Radar, Air Quality Modeling, Capacitive Deionization, Application of Nonthermal Plasma in Environmental Remediation, Irrigation Water Requirements, Gravimetric Geoid Modeling
- Structural Engineering: Ultra-High-Performance & Self-Compacting Concrete, 3D-Printed Concrete, Corrosion & Durability, Cold-Formed Steel Design, Structural Fire Engineering, Rheology & Shotcrete Modeling
- Transportation & Infrastructure: Pavement Materials & Mix Design, Dynamic Structural Testing, Urban Transport Economics & Policy, Traffic Simulation (SUMO, VISSIM, MovSim), Infrastructure Resilience
- Geotechnical Engineering: Ground Improvement & Geosynthetics, Foundations in Soils and Rocks, Tunnels in Soils and Rocks, In-situ Testing, Geoenvironmental Remediation, Soil Dynamics, Mitigation of Landslides, Stability and Safety of Mines

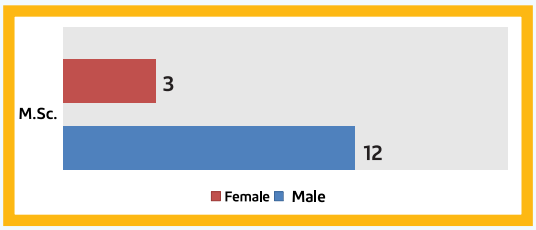
MATHEMATICS AND STATISTICS

About Department:

The Department of Mathematics and Statistics at IIT Tirupati, established in August 2019, is one of the institute's most dynamic academic units, offering mathematical, statistical, and computing courses across all levels. Notably, IIT Tirupati is the third IIT after IIT Bombay and IIT Kanpur to offer an M.Sc. in Mathematics and Statistics. The department is also active in research, with faculty and students contributing to areas such as ergodic theory, fractals, and high-performance computing, and has been recognized with distinctions such as the Prof. A.R. Kamat Award for Best Ph.D. Thesis of ISPS-2024.

Labs Available

- Basic Programming laboratory
- Data science Programming Laboratory
- Scientific Computing Laboratory
- Mathematics and statistics lab 1 & 2



Facilities

- Digital Tools & software (Matlab, Python, Latex, PowerBi)
- Computational Lab Access
- Visualization & Teaching Tools (Interactive Projection System)
- Project and Research support

Areas of Research

- Statistical Finance
- Hyperbolic Partial Differential Equations
- Multivariate Response Models
- Numerical Analysis
- Quantitative Finance
- Representation Theory
- Non-parametric copula estimation
- Generalised Linear Models
- Lattice Boltzmann Method

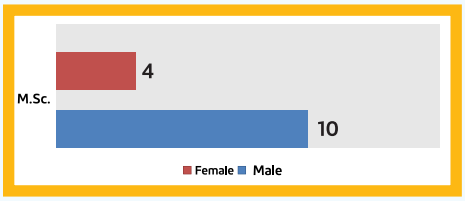
Project Duration: 6 months

CHEMISTRY

About Department:

The Department of Chemistry at IIT Tirupati features 13 core faculty members and offers M.Sc. and Ph.D. programs, with plans to launch a BS-MS dual degree in Chemical Science making it one of only three IITs to offer such a program. The department is active in cutting-edge research, regularly organizes national conferences, and has secured major funding from agencies like DST and SERB. With modern labs and expertise spanning nanomaterials, energy storage, and computational chemistry, the department is committed to training future scientists to address challenges in healthcare, environment, and energy.

Facilities & Software Access



- Sophisticated spectroscopic techniques like
- NMR spectroscopy
- Mass spectroscopy
- FTIR spectroscopy
- GC-MS (Gas Chromatography Mass Spectrometry
- HPLC (High Performance Liquid Chromatography)

Labs Available

- Organic Chemistry Laboratory
- Inorganic Chemistry Laboratory
- Physical Chemistry Laboratory
- Computer Programming and Numerical Methods in Chemistry

Area of Research

- Protein hybrid nanostructures of diverse Applications
- Biomimetic studies/drug discovery
- Organic synthesis
- Transition metal catalysis
- Synthesis of biologically important/active Organic Molecules
- Computational Modelling and Geometric information engine
- Theoretical investigation of structure and dynamics of water/aqueous Solutions
- Theoretical Physical Chemistry
- Batteries and electrochemistry
- Hybrid (organic - inorganic) semiconductor materials

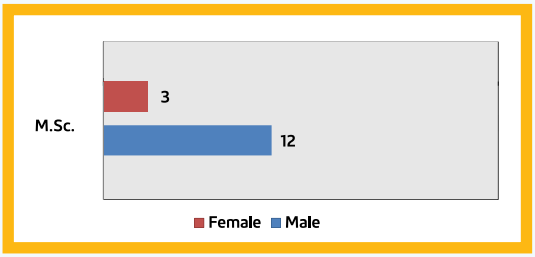
Project Duration: 1 Year (Two Phases)

PHYSICS

About Department:

The Department of Physics began in 2015 by offering B.Tech foundational courses and, since 2018, has hosted Ph.D. scholars. We launched our first M.Sc. Physics cohort in 2020 and inaugurated a B.Tech in Engineering Physics program in 2024. With a blend of theoretical rigor and experimental excellence, our faculty collaborate on interdisciplinary research and secure competitive grants, positioning us at the forefront of both classical and quantum domains.

Facilities & Software Access



- Physics Lab I & II
- Advanced Physics Laboratory
- Computational Physics Lab
- Applied Electronics Lab
- Software & Computational Tools: MATLAB, Python, COMSOL, Gaussian, CMT-Analyst

Labs Available

- Physics Laboratory I & II
- Advanced Physics Laboratory
- Computational Physics Lab
- Applied Electronics Lab

Area of Research

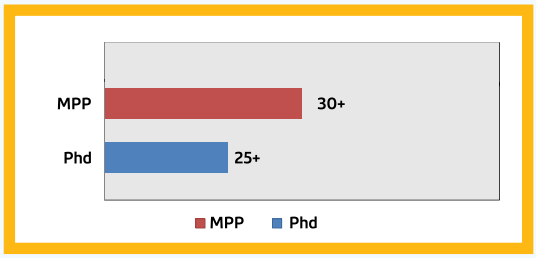
- Precision laser spectroscopy, Quantum Optics, Quantum communication, Quantum Sensing and metrology
- Astronomy and Astrophysics
- Condensed matter physics
- Computational Soft matter physics
- High energy phenomenology
- Ultrafast Quantum Dynamics
- Plasma physics
- Theoretical Quantum Information and computation

Project Duration: 1 Year (Two Phases)

HUMANITIES & SOCIAL SCIENCES

About Department:

Established in 2015, the Department of Humanities & Social Sciences provides core and elective courses in Economics, English, Philosophy, Finance, Public Policy, Urban Planning, Organisational Behaviour, Operations Management, and Data Analytics to all B.Tech and postgraduate students. We also offer compulsory courses in English and Professional Ethics, along with first-year foreign-language proficiency courses in Spanish, German, Sanskrit, and Japanese. In 2022, we launched our Master of Public Policy (MPP) program and currently host over 30 MPP students and more than 25 Ph.D. scholars. Our faculty lead data-driven research, workshops, and collaborations most recently with CRISP to train empathetic, evidence-based policy professionals.



Facilities & Software Access

- **Policy Data Lab** with Stata, R, Python, ArcGIS, QGIS & Nvivo
- **Foreign Language Proficiency Labs** (Spanish, German, Sanskrit, Japanese)
- **Seminar & Workshop Spaces** for guest lectures and CRISP collaboration

Labs Available

- Policy Data Lab
- Computational Social Science Lab
- Foreign Language Proficiency Labs

Area of Research

- Policy Analysis & Program Evaluation
- Governance, Institutions & Public Administration
- Development Economics & Inclusive Growth
- Health Policy & Demographic Change
- Education Policy & Human Capital Development
- Social Protection & Welfare Policy
- Urban & Rural Studies & Policies
- Environmental Policy & Climate Governance
- Technology & Data for Policy Innovation
- Gender, Equity & Social Justice
- Public Finance & Fiscal Policy
- Political Economy & Regulatory Policy
- Field-Based Policy Research & Stakeholder Engagement
- Geospatial & Spatial Analytics in Policy

Project Duration: 1 Year (MPP capstone & thesis)

ACHIEVEMENTS

- Published 2 journal and 10 conference papers in premier Software Engineering venues.
- Research presented by 10 UG, 1 M.Tech, 1 MS (Research), and 2 Ph.D. students at international conferences.
- Collaborations with 2 global universities and 3 top industry partners.
- UG students interned abroad and presented at ISQED 2025, San Francisco State University, USA.
- Mechanical Engineering students presented at InterNoise; one won Best Poster at CREEP 2024, IISc Bangalore.
- ISRO Robotics Challenge 2025: Ranked among top 37 out of 580+ institutions for a Mars drone prototype using GPS-independent navigation.

- **Scholarships & Awards:**

  - ESRI India GIS Master's Scholarship (2025)
  - 1st Place in Bridge Design, Runner-Up in City Planning at Civil Conclave 2025, IIT Roorkee
  - INSDAG 2024 National Finalist – Steel Roof Design
  - MITACS Globalink Award – Research at Dalhousie University, Canada
  - Best Paper Award – ICBEST 2025 (Biomedical Research)
  - G20 Summit Delegate – MPP student
  - Lindau Nobel Laureate Meeting 2025 – Student representative
  - Prime Minister's Doctoral Fellowship – 2 Ph.D. scholars
  - DAAD Bi-national Ph.D. Fellowship – 3 students from Chemical Engineering

NEW INITIATIVES

TEDx

TEDxIIT Tirupati, a licensed TEDx event organized entirely by the students of IIT Tirupati, is a testament to the institute's culture of initiative, creativity, and collaboration. From curating impactful speakers and managing corporate sponsorships to handling logistics, design, media outreach, and web operations, the event provides a platform where students demonstrate vital industry-relevant skills.

The success of TEDxIIT Tirupati highlights the ability of our students to work in cross-functional teams, solve real-time problems, manage large-scale events under tight timelines, and lead with accountability. It reflects their strong communication skills, adaptability, project management capabilities, and above all their drive to turn ideas into action.

Events like TEDx not only enrich our campus culture but also equip our students with the professional mindset and soft skills essential for excelling in the modern workplace.

SMART INDIA HACKATHON (SIH) 2024

IIT Tirupati served as one of the 51 nodal centers for the Smart India Hackathon (SIH) 2024 Grand Finale, held on December 11-12, 2024, hosting 22 teams each comprising six students and two mentors for a 36-hour coding marathon focused on real-world problem statements from the Ministry of AYUSH.

HANS INDIA

2-day nationwide Smart India Hackathon to begin on Dec 11

- IIT Tirupati to host the grand finale which will feature 22 elite teams each comprising six stu-dents
- They will compete to develop solutions for four critical problem statements identified by the Ministry of AYUSH

PRADEEP VENKATESWARLU KANTI TIRUPATI

THE 7th edition of the Smart India Hackathon (SIH) will kick off on December 11, 2024, at 51 centres across the country.

Union Minister for Education Dharmendra Pradhan will virtually inaugurate the event, which aims to provide stu-dents with a dynamic platform to tackle real-world problems and promote a culture of innovation and problem-solving.

Student teams will either address problem statements provided by various Ministries, Departments and Indus-tries or propose their own ideas in the Student Innovation Category, covering 17 themes such as Healthcare, Smart Technologies, Sustainability and Disaster Management.

This year, SIH has seen remarkable growth, with over 250 problem statements submitted by 54 Ministries, State governments, PSUs and Industries. The number of insti-tute-level hackathons leading up to the national event has surged by 240 per cent, from over 900 in 2023 to more than 2,247 in 2024. This expansion makes SIH 2024 the largest edition to date.

Approximately 86,000 teams participated at the institute level, with around 45,000 student teams – each consisting of six students and two mentors, advancing to the national round.

The grand finale facilitates valuable interaction between students, educational institutions and government offi-cials, fostering a collaborative environment that encour-ages innovation.

The Indian Institute of Technology Tirupati will host the grand finale on December 11 and 12, representing a piv-otal moment for the institute as one of the 51 nodal cen-tres selected by the Ministry of Education.

The event will feature 22 elite teams, each comprising six students, competing to develop solutions for four critical problem statements identified by the Ministry of AYUSH. These challenges address key needs within traditional medicine and holistic wellness, reinforcing the govern-ment's dedication to advancing these fields through inno-vation.

Teams have been chosen for their outstanding problem-solving abilities and creative approaches, ensuring a high-caliber competition. The Government of India will award cash prizes to winners of each problem statement, further incentivising research and development among young innovators. This finale not only highlights the talent and ingenuity of India's youth but also cements IIT Tirupati's role in nurturing future engineers and entrepreneurs.

The event challenged participants to develop innovative solutions such as a secure AYUSH startup registration portal, an interactive virtual herbal garden, and systems for tracking institutional innovation metrics.

Four teams Kode Crafts, Sahvrindam, Carbon Daters, and Pragati Mitra emerged as winners, each receiving a cash prize of ₹1 lakh for their outstanding contributions.

The hackathon not only showcased IIT Tirupati's commitment to technological innovation and collaboration but also connected over 170 participants with industry experts and policymakers, reinforcing the institute's role as a national leader in fostering creativity and problem-solving among students.

BEYOND ACADEMICS

Fests

Alongside academic pursuits, the institute organizes various co-curricular and extracurricular activities, planned and overseen by students. Several clubs have been formed to encourage students to explore their interests and learn new skills.

Tirutsava

Tirutsava, the annual techno-cultural fest of IIT Tirupati, began as the technical festival “Anfang” and has since evolved into a vibrant three-day celebration that unites the student community in learning, creativity, and enjoyment.

Each edition of Tirutsava is marked by electrifying performances from renowned artists and interactive experiences that reflect the innovative and inclusive spirit of IIT Tirupati. With its diverse events and festive atmosphere, Tirutsava has become a much-anticipated highlight of the academic calendar, embodying the institute's commitment to holistic student development and a vibrant campus life.

Tachyon

Tachyon, our college's annual technology fest, celebrates students' innovation, aptitude, and engineering skills. It is where our future entrepreneurs, roboticists, and programming wizards showcase their talents through various competitions, hackathons, and symposiums. To top it all off, Aravind S. Bhardwaj, CEO of Tutr Hyperloop, delivered an inspiring session on innovations in the automotive space.

CLUBS

Digital Wizards

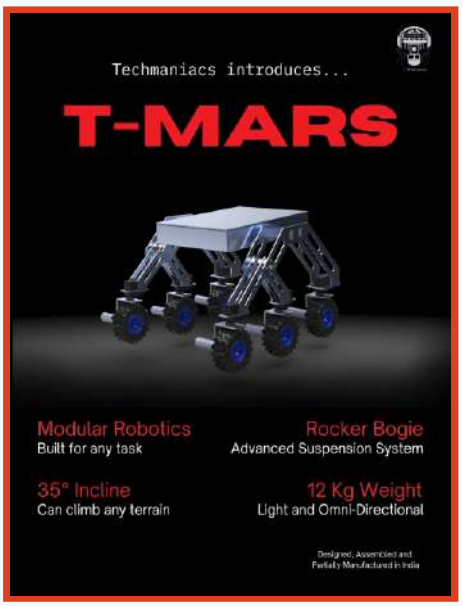
Digital Wizards is IIT Tirupati's official coding club, dedicated to empowering students across diverse domains including App/Web/Game Development, Competitive Programming, Cybersecurity, Web3, and Parallel & Quantum Computing. We host hands-on sessions, contests, and hackathons that provide real-world tech exposure.

Sigma Squad

The official AI/ML club of IIT Tirupati, dedicated to fostering a vibrant and future-ready tech ecosystem on campus. Members have demonstrated excellence by securing top positions in national competitions, including 3rd place at the Aravind EyeCare Hackathon and qualifying for the finals of the Smart India Hackathon. The club also drives impactful projects, such as developing are in forcement learning-based stock trading system and an institute-wide chatbot.

TechManiacs (Robotics Club)

TechManiacs is the official student-led tech innovation club of IIT Tirupati, bringing together passionate minds across Electronics, IoT, Robotics, and Aerial Robotics (Drones). We focus on building real-world solutions through hands-on projects, competitions, and collaborations. In 2024–25, the club secured 3rd and 5th places in national-level problem statements at the Inter-IIT Tech Meet, ranked among the top 15 in the ISRO Robotics Challenge (out of 580+ colleges), and launched major in-house initiatives like the T-MARS Rover and Project AVLOK, a fully funded surveillance drone.



Navgati (Automobile Club)

The Automobile Club of IIT Tirupati is the institute's premier student body for automotive engineering and motorsports innovation. With a strong emphasis on experiential learning, the club empowers students to design, fabricate, and optimize high-performance vehicles for national competitions such as the ISIE Indian Karting Race and Formula Imperial. Members gain hands-on expertise in CAD, FEA, vehicle dynamics, powertrain integration, and manufacturing processes, working collaboratively in a fast-paced, project-driven environment.

Gagan Vedhi

Gagan Vedhi is IIT Tirupati's official Astronomy and Space Sciences Club, fostering hands-on learning through telescope building, CubeSat development, and computational astronomy using open-source tools and machine learning. The club also hosts public outreach events, improving communication and event management capabilities. Gagan Vedhi nurtures interdisciplinary collaboration, preparing students for careers in aerospace, data science, and space tech.

VelR (Rocketry Club)

The VelR Rocketry Club at IIT Tirupati stands out among new IITs for its fully indigenous design and manufacturing of rocket motors, including KNSB propellant grains, and successful static fire tests. The club also developed advanced avionics with real time data logging and fabricated carbon fibre rocket bodies and fins.

Entrepreneurship Cell

The Entrepreneurship Cell (E-Cell) at IIT Tirupati actively fosters an innovation-driven campus culture through a variety of hands- on programs and industry interactions.

Literary, Sports, and Other Clubs

IIT Tirupati boasts a vibrant array of cultural and sports clubs that foster creativity, teamwork, and holistic development among students. Nisarga, the institute's environment club, has made a tangible impact by diverting over 450 kg of paper waste from landfills, organizing tree plantation drives with freshers, conducting awareness quizzes, and launching a Biodiversity Portal to promote sustainability on campus. The Quizzing Club has made its mark by qualifying for the finals in the India Quiz at Inter IIT 7.0, conducting monthly quizzes, and organizing major events during Tirutsava.

PROMINENT RECRUITERS AT IIT TIRUPATI

IT COMPANIES

Google
accenture
SAMSUNG
IBM
ORACLE
TCS TATA CONSULTANCY SERVICES
Infosys
D E Shaw & Co
MathWorks
SIEMENS
TURING
buyhatke! The Ultimate Shopping Experience!
INCREFF Incredible Efficiency
LUCIO
kyndryl
tescra
Great Learning POWER AHEAD
[x]cube LABS

CORE COMPANIES

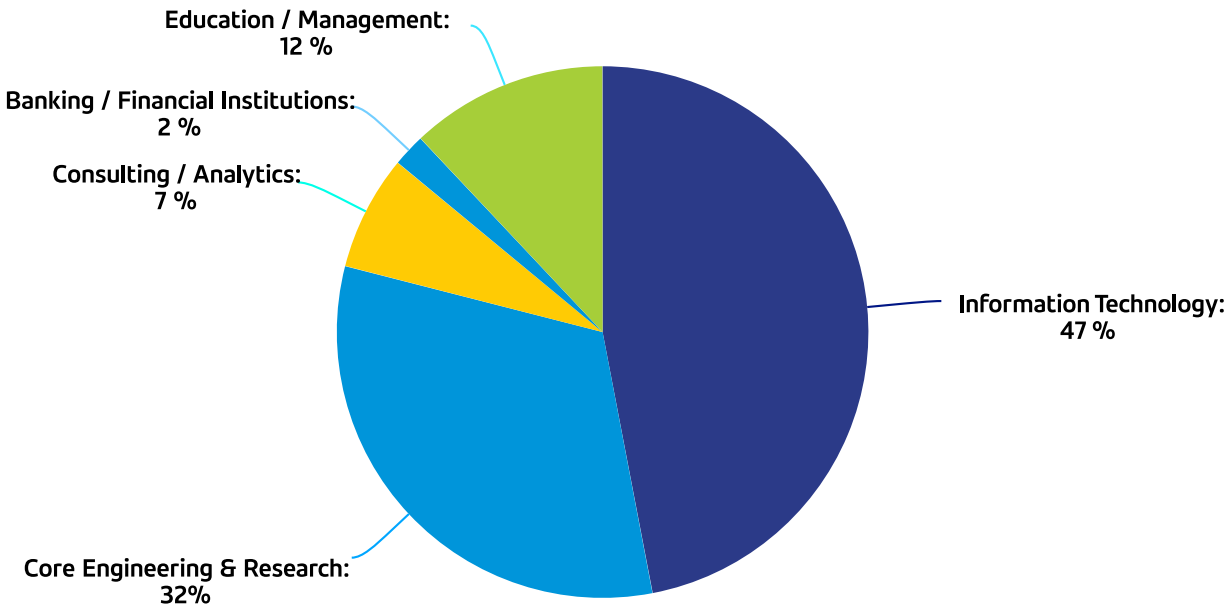
Texas Instruments
HYUNDAI
Bharat Petroleum
HP
IndianOil
LARSEN & TOUBRO
c2i
भारत इलेक्ट्रॉनिक्स BHARAT ELECTRONICS
APPLIED MATERIALS
ZS
UKG
Tredence Connect the Dots
epam
FACTSET
SIGNALCHIP
SKYROOT AEROSPACE
Mahindra
vehant TECHNOLOGIES
ZLTECH
VERSA NETWORKS
Baker Hughes
gps
AMARA RAJA
Kickdrum
KALPA-TARU POWER TRANSMISSION LIMITED
ALOE E-CELL
SIGNICUDE
GPS RENEWABLES

PROMINENT RECRUITERS AT IIT TIRUPATI

INTERNSHIPS

ICICI Bank, ABB, Lekha Wireless Solutions, BNY MELLON, Cummins, NVIDIA, UCIL, Texas Instruments, OMNI, Atoll Solutions, accenture, Alation, Texas A&M University, SAINT-GOBAIN, publicis sapient, मानकः पथप्रदर्शकः, HP, TEJAS NETWORKS, TCS Research & Innovation, APPLIED MATERIALS

DOMAIN-WISE PLACEMENT STATISTICS



Internships 2024-25

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