



175

YEARS OF
IIT ROORKEE
Estd. 1847



भारत 2023 INDIA

वसुधैव कुटुम्बकम्

ONE EARTH • ONE FAMILY • ONE FUTURE

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE



INTRODUCTION

Our history

IIT Roorkee started its golden pages as the first Engineering College of Asia and among the commonwealth countries, in 1847. The college added feathers to its aim of sparking thoughts, imaginations, aspirations, and services to the nation thereby elevating itself as the first Engineering University of independent India, namely the University of Roorkee. In 2001, it was metamorphosed into the Indian Institute of Technology Roorkee.

Vision

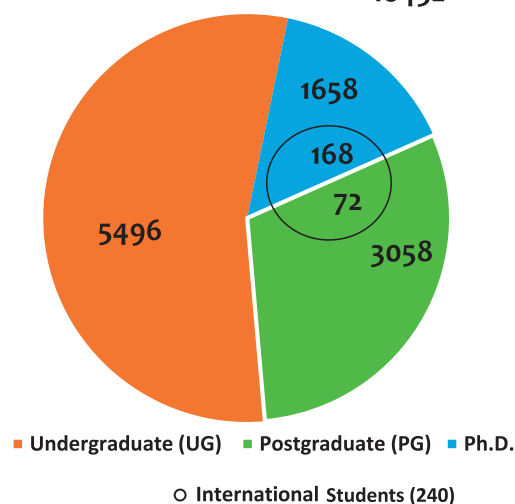
To create an environment that shall foster the growth of intellectually capable, innovative and entrepreneurial professionals, who shall contribute to the growth of Science and Technology in partnership with industry and develop and harness it for the welfare of the nation and mankind.

Achievements

1. #335 in QS World University Ranking 2024
2. #116 in QS Asian University Ranking 2024
3. #101-150 QS WU Rankings by subject - Civil and Structural Engineering
4. #1 among IITs in *International Students enrollment*
5. #3 among IITs in *Citations per faculty, QS 2024*
6. #1 in Architecture in the NIRF Ranking 2023
8. Highest Number of students selected for Google Summer of Code (GSoC) in India for the past 5 years.
9. The Most Innovative Research Institute of The Year Award for Industrial Innovation
10. IIT Roorkee Bags Questel IP Excellence Award 2022
11. Union govt. issued Rs 175 coin to mark IIT-Roorkee's establishment.

Current Student Enrollment

Total Number of Students : 10452



Land of Infinite possibilities

- Excellence in the internationalization of Education Award by FICCI
- 13 awards under 'Newton Bhabha Fund-PhD Placement Programme'
- GRIHA Trophy at NASA for the Design of Terminal Building at Bagdogra Airport
- IITR faculty members have been awarded with several prestigious international awards/honors such as:
 - 04 : American Chemical Society (ACS) membership awards.
 - 19 : Fellow of the Royal society awards.
 - 18 : Fulbright Fellowship Awards
 - 10 : Humboldt Awards
 - 02 : IBM Faculty Awards
 - 10 : Japan Society for the Promotion of Science (JSPS) Fellowship awards

RESEARCH

Research flourishes in 23 departments as well as in dozens of centers, labs, and other research facilities that convene experts across disciplines to explore new intellectual frontiers and tackle important societal challenges. IITR recognizes Sponsored Research (SR) and Industrial Consultancy (IC) as the essential attributes of research and development. A full-fledged office operating under Dean (SRIC) provides administrative and accounting support to the faculty undertaking sponsored research and consultancy work.

Sponsored Research details 2023-24

No. of Sponsored research Projects: 291

No. of Funding Agencies: 90

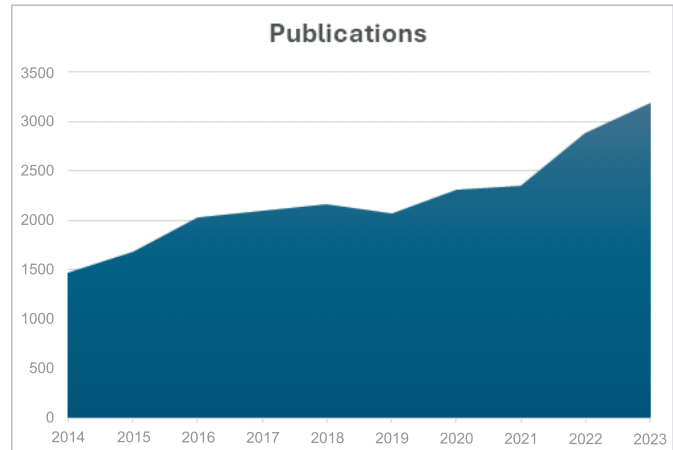
Total Amount received (rupees): 920 million

Consultancy Project details 2023-24

No. of Consultancy research projects: 921

No. of Client organization: 784

Total Amount received (rupees): 962.9 million



Original Research Publications

405
Patents filed

15
Technologies
Transferred

17
Copyrights
Registered

8
Trademarks
Registered

06
PCT Application

19
Design
Registered

TIDES Business Incubator

Programmes available

1. TIDE 2.0
2. NIDHI EIR
3. NIDHI PRAYAS
4. NIDHI SSS
5. TIDES TBI INCUBATION
6. BIRAC BIONEST
7. Innovaons for Defence Excellence (iDEX)
8. Startup India Seed Fund Scheme(SISFS)
9. EIL
10. HDFC SmartUp Parivartan Grant



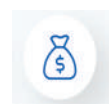
IMPACTS



1800+
Employment
Generation



160+
Start-up
Supported



Rs 450 Crore +
Fund Rasised



450+
Mentor
Associated



20,000 sq/ft
Dedicated
Incubated Space



6 have been incubated by

#IITRoorkee

1. BluSmart
2. Classplus
3. DealShare
4. Ditto Insurance
5. FamPay
6. Spinny

Total Cumulative Valuation of Startup Portfolio: **3500cr +**

INNOVATION

IIT Roorkee educates students to serve as leaders in the innovation and economy with the knowledge, skills, and confidence to develop, scale and deliver breakthrough solutions to real-world problems. The Institute combine opportunities for hands-on training and entrepreneurship education, building a dynamic innovation infrastructure across campus, and fostering a connected community of science researchers focused on global relevance and impact



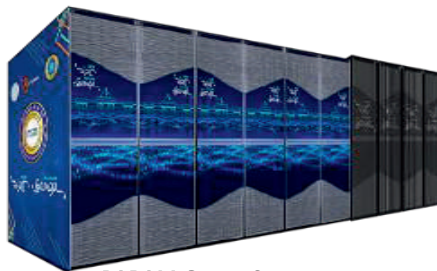
TIDES
Business Incubator



iHUB DivyaSampark

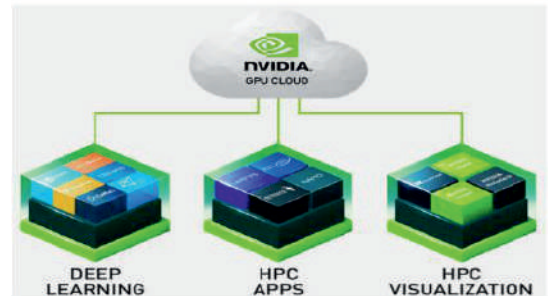


Smart Cities Projects



PARAM Ganga Super computer

PARAM Ganga – High-Performance Computing (HPC) system under the National Supercomputing Mission of Government of India has been established at IIT Roorkee.



DGX1@IITR

The NVIDIA DGX-1 is a deep learning system, architected for high throughput and high interconnect bandwidth to maximize neural network training performance.

E-Cell: Entrepreneurship Cell, a campus group at IIT-R is committed to nurturing the ideas of budding entrepreneurs. E-Cell mentors, instills hunger for growth, team spirit, and other qualities in budding entrepreneurs.

E- Learning Cell: E - Learning Centre (ELC) formerly Educational Technology Cell (ET CELL), is primarily conceived to produce high quality Video/Web/Multimedia based instructional material, syllabus-based content development for the National Programme on Technology Enhanced Learning (NPTEL) project, and short courses/training programmes for faculty for development of video/web-based courses.

Start-up from Alumni Network



and counting...

ACADEMICS PROGRAM

The Institute offers several Undergraduate programmes, Integrated dual-degree programmes, and Integrated Masters Programmes in different disciplines of engineering, technology, and architecture. It also offers postgraduate programmes in specialized areas leading to Master's degree in technology, architecture, sciences, and management. In addition, the institute is engaged in advanced-level research and offers doctoral and postdoctoral programmes in the areas of cutting-edge technologies and sciences.

Departments

1. Architecture and Planning
2. Applied Mathematics and Scientific Computing
3. Biosciences and Bioengineering
4. Chemical Engineering
5. Chemistry
6. Civil Engineering
7. Computer Science and Engineering
8. Department of Design
9. Earthquake Engineering
10. Earth Sciences
11. Electrical Engineering
12. Electronics and Communication Engineering
13. Hydrology
14. Hydro and Renewable Energy
15. Humanities and Social Science
16. Mathematics
17. Mechanical and industrial engineering
18. Metallurgical and Materials Engineering
19. Management Studies
20. Paper Technology
21. Physics
22. Polymer and Process Engineering
23. Water Resources Development and Management

School

1. Mehta Family School of Data Science and Artificial Intelligence

Academic Centres

1. Centre of Excellence in Disaster Mitigation & Management (CoEDMM)
2. Centre for Transportation Systems (CTRANS)
3. Centre for Nanotechnology
4. Centre for Photonics and Quantum Communication Technology (CPQCT)
5. Centre for Space Science and Technology
6. Center for Sustainable Energy
7. Centre for Sustainable Rural Development
8. International Centre of Excellence for Dams (ICED)
9. Centre for Indian Knowledge System

Scholarships Available

1. James Thomason Scholarship
2. Merit – Cum- Means Scholarship
3. INSPIRE Scholarship
4. Encore Scholarship
5. Heritage Awards
6. Aditya Birla Scholarship
7. Sakuntala Fellowship (For females only)
8. 'Golden Girl' Scheme for the First Rank Holder (Gold Medalist) female candidates for admission in the Masters and Ph.D. programmes

How to Apply

The students can be admitted through the following Categories:

1. Through GATE Examination
 2. Study in India Portal
<https://studyinindia.gov.in/>
 3. ICCR Scholarship - Government of India <http://a2ascholarships.iccr.gov.in/>
 4. Indian Technical & Economic Cooperation (ITEC)
 5. Indian Govt. Fellowship for ASEAN Students
 6. Foreign Government Sponsorships
 7. International MoUs
- Details at <https://ir.iitr.ac.in/HowToApply>

Programmes

1. Bachelors Programmes

- a. B.Tech/B.Arch
- b. Integrated (B.Tech + M.Tech)

2. Masters Programmes

- a. M.Tech/ M.Arch & M.U.R.P./ M.Sc
- b. MBA

(<https://ir.iitr.ac.in/pdf/ProgramsIITR.pdf>)

3. PG Diploma (For sponsored candidates)
4. Doctoral Programmes (Ph.D.)
5. Joint/ Dual Doctoral Degree Programme

ACADEMICS PROGRAM

Study @IIT Roorkee

1. Admission to UG programmes are through JEE Advanced only
2. PG/PhD candidates are required to submit their application through their embassy in India/SII/ICCR
3. **Fellowships:** Meritorious students can avail up to 100% tuition fee waiver
4. **Eligibility:** At least 60% marks or CGPA of 6.00 on a 10 point scale at the qualifying degree level is required.
5. 23 Departments, 4 Academic Centres & 1 School offer, 60 Postgraduate Programmes in Engineering, Science, Management, Humanities & Social Sciences, Designs and Architecture & Planning in addition to doctoral programmes.



Minors and Honours in Undergrad programmes

Minor Specialization

Students who are willing to excel in some specialization other than his/her own department, have the option for doing a Minor specialization in that department.

Departmental Honours

Students with interests in their own department and having a CGPA greater than 7.5 can take 4-5 extra courses from their department and pass out with an Honours degree.

Switching to an Integrated Dual Degree Program (IDD) from BTech Program

Students at the end of their 3rd year are offered an option to switch to an integrated dual degree program (BTech + MTech). This option to switch is offered only to the students having a CGPA greater than 7.5 and an approval from their respective departments.

Change of Registration from MTech/IDD to Ph.D.

Students pursuing M.Tech / M.Arch / MURP/ IDD/ IMT programs at IIT Roorkee with CGPA not less than 8.50 may opt for a lateral entry to the Ph.D. program. This option can be availed after completing two semesters of M.Tech/ M.Arch/ MURP, or after completing all theory courses of IDD/IMT.

Certification Courses

E & ICT Academy, IIT Roorkee

India is fast emerging as a world power in Information, Communication Technology, and Electronics (ICTE) sector. To complement its growth and further development, there is an ever-increasing need for trained professionals with specialization in this space. This includes training of professionals not only in existing and advanced technologies but also in the fields of electronic manufacturing. To meet this objective MeitY has approved a scheme and set up Electronics and ICT (E&ICT) Academy at IIT Roorkee and other IITs/NITs.

Online courses

- **Electric Vehicle:** 6 Months course
- **Full Stack Software Development:** 10 Months course
- **Cloud Computing and DevOps:** 7 Months course
- **PG Certificate in Data Science & AI:** 09 Months course

Abilities with Years of Experience

- Beneficiaries Trained: 12,000 +
- Industry Partners : 20+ years
- Academic Partners : 30+ years
- IIT- Roorkee Teaching Members : 100+ years

Faculty Development Programs (FDP's) in Emerging Technologies

- Natural Language Processing
- IOT & Applications (Smart Systems)
- Data Science for All
- Machine Learning for Computer Vision
- Numerical & Engineering computation, optimization for Physicists, Scientists & Engineers using open-source- SCILAB
- Android & Programming Applications
- Designing with FPGA's (Intel)
- Research Methodology
- Blockchain Technology
- Deep Learning & Large Language Models



RESEARCH AREAS

Applied Mathematics and Scientific Computing

- Applied Mathematics, Partial Differential Equations
- Different Solutions Methods of Partial Differential Equations
- Abstract Differential Equations
- Initial and Boundary Value Problems
- Fractional Differential Equations, Approximations of Solutions
- Method of Lines, Inverse and Ill-posed Problems, Inverse problems in PDE
- Numerical Optimization, Evolutionary Algorithms
- Swarm Intelligence, Global Optimization, Nature Inspired Algorithms, Supply Chain Management

Architecture and Planning

- Energy Efficiency in Buildings, Life Cycle Analysis
- Architectural Design
- Human Factor and Ergonomics
- Embodied Energy in Housing, Futuristic Architecture
- Urban & Rural Development Planning
- Aesthetics in Architecture, Folk Art/ Craft and Technology
- Economic and Community Development, Urban Mobility
- Culturally Responsive Built Environments
- Architectural Journalism
- Design for Disabled, Ageing & Children, Inclusive Mobility

Biosciences and Bioengineering

- Structural and Computational Biology
- Cell and Molecular Biology
- Biological Engineering

Chemical Engineering

- Risk & hazard analysis for chemical, petroleum, petrochemical & allied industries, life cycle assessment
- Development of low-cost treatment technology
- Life Cycle Assessment
- Biological and physico-chemical treatment of wastewaters, and VOC control technology
- Biochemical engineering
- Thermal processing of biomass materials and industrial wastes
- Novel catalyst development

Chemistry

- Organic synthesis methodology
- Organic Synthesis & Catalysis
- Novel Metallo-Carbene Chemistry
- Asymmetric Catalysis
- High Energy Density Materials
- Materials Chemistry
- Novel Reactions
- Visible light photoredox chemistry
- Heterocycles
- Sustainable Chemistry
- Inorganic Biochemistry
- Molecular Modelling

Civil Engineering

- Environmental engineering
- Geomatics Engineering
- Geotechnical Engineering
- Hydraulics Engineering
- Structural Engineering
- Transportation Engineering

Civil Engineering

- Environmental engineering
- Geomatics Engineering
- Geotechnical Engineering
- Hydraulics Engineering
- Structural Engineering
- Transportation Engineering

Computer Science and Engineering

- Computer Networks and Cyber Security
- Computer Architecture
- Algorithms
- Artificial Intelligence and Machine Learning
- Data Analytics and Natural Language Processing
- Cloud Computing and Internet of Things (IoT)
- Vision and Image Processing
- Theory and Software Engineering

Department of Design

- Product Design
- Visual Design
- Sustainable Design
- Innovation and Entrepreneurship
- Design Thinking
- Intellectual Property Development and its Management

Earthquake Engineering

- Soil Dynamics
- Structural Dynamics
- Engineering Seismology and Seismotectonics
- Instrumentation

Earth Science Engineering

- Application of Geophysical Signal Processing for Earth System
- Biostratigraphy, Organic Evolution and Paleoclimate
- Crustal Deformation Studies and Transparent Behavior Analysis using GPS Data
- Electromagnetic and Magneto telluric Methods
- Engineering Geology
- Forward and Inverse Modelling of Resistivity data for Ground Water Prospecting
- Forward and Inverse Modelling of Seismological Data
- Gravity and Magnetics Prospecting
- High pressure & high temperature lab investigation
- Himalayan Tectonics and Orogeny
- Integrated reservoir characterization
- Metamorphic and Precambrian Tectonics

Electronics and Communication Engineering

- Microelectronics & VLSI
- Communication, Network and Signal Processing
- RF & Microwave

Electrical Engineering

- Electric Drives and Power Electronics (EDPE)
- Power System Engineering (PSE)
- Instrumentation And Signal Processing
- Systems And Control (S&C)

Hydrology

- Surface water Hydrology
- Ground Water Hydrology
- Watershed Management
- Integrated Water Resources Management

- Real-time inflow forecasting
- Extended hydrological prediction
- Reservoir Operation Studies
- Climate Change impact on hydrology and eco-hydrology
- Catchment Erosion Assessment & Modelling
- CO₂ geo-sequestration and multiphase flow modelling
- Water-Energy-Environment Nexus
- Water and Wastewater Treatment
- Membrane Science & Desalination
- Eco-hydrological resilience analysis

Hydro and Renewable Energy

- Renewable Energy Systems
- Life Cycle Assessment (LCA)
- Biofuels/ PEM Fuel Cells/ Hydropower Projects/ Grid reliability and resilience
- Power Sector Regulation/ Load Forecasting/ Environmental Management/Hydraulic Turbine, Floating Solar/ Biogas Technology,
- Electric Vehicle charging infrastructure, Transportation Electrification/ Hydrokinetic Energy, Solar Energy/
- Small Hydropower, Integrated Renewable Energy Systems
- Grid-Connected renewable energy systems/ Power Market Design
- Biochar, Waste Management

Humanities and Social Sciences

- Economics
- English
- Psychology
- Sociology

Mathematics

- Algebra, Number Theory, Coding Theory and Cryptography
- Complex Analysis, Approximation Theory, Fourier Analysis
- Computational Fluid Dynamics
- Bio-Mathematics
- Control Theory, Operator Theory
- Functional Analysis
- Soft Computing-Evolutionary Algorithms and Swarm Intelligence and Parallel Computing
- Fuzzy System
- Image Processing
- Numerical Analysis and Simulations of PDEs
- Operational Research
- Partial Differential Equations and Inverse/ill posed problems

Mechanical and Industrial Engineering

- Collaboration in Research and Development of New curriculum in Sound and Vibration
- Slurry Erosion Properties of Laser Cladding
- Cost-effective transportation of bulk solids through slurry pipelines
- A study of Forced Convection Condensation of Eco-friendly refrigerators inside a Horizontal Tube
- Influence of Low Frequency Vibration on on Activity Comfort while travelling by Railway Vehicles
- Channel Heat up Experiments

Metallurgical and Materials Engineering

- Ceramics - structural, energy storage, electronics
- Composite for structural applications and adhesive joining/ Corrosion
- Extractive Metallurgy
- Fatigue and Fracture Mechanics
- High Temperature Deformation Behavior
- Joining of Materials
- Severe Plastic Deformation and Bulk Nanostructured materials
- Powder Processing of Materials
- Tribology
- Computational Material Science
- Biomaterials for Tissue Engineering
- Nanomaterials Synthesis and Applications

Management Studies

- Information Systems
- Data Science
- Financial Management
- Knowledge Management
- Marketing Management
- Operations Research
- Organisational Behavior
- Human Resource Management
- Quality Management

Paper Technology

- High temperature high performance liquid chromatography - HT-HPLC
- Novel Packaging Technologies
- Bio-based materials, Biocomposites and Bioplastics synthesis
- Wireless sensor Network and IoT
- Identification and removal of pollutants

Physics

- Atmospheric & Space Physics
- Atomic & Molecular Physics
- Condensed Matter Theory
- Condensed Experiment
- High energy Theory
- Nuclear Physics Theory
- Nuclear Physics Experiment
- Nuclear Engineering
- Photonics

Polymer and Process Engineering

- Membrane (Cation exchange, Anion exchange and Bipolar) synthesis and application in Electrodialysis
- Polymer Science
- Design & Synthesis of Conjugated Organic Building Blocks for Development of Novel Metallopolymers
- Polymeric Materials
- Nano-materials and quantum-dots
- Polymer for advanced application
- Tissue Engineering
- MATERIALS: Polymeric Blends, Composites and Molecular Nano Composites for Engineering & Aerospace Systems, and their Design, Processing and Sustainability

Water Resources Development and Management Department

- Ecohydrological Modelling
- Marine Electrification, Cyber Security for industrial Control systems
- Water Resources Projects, Planning & Management
- Hydrological Modelling
- Rainwater Harvesting
- Flood Forecasting
- Vulnerability Analysis

Centre of Excellence in Disaster Mitigation and Management (CoEDMM)

- Shallow landslides
- Spatiotemporal modelling of geohazards
- Multiscale numerical modelling of geohazards
- Rainfall Intensity-Duration (ID) thresholds for debris flows
- Landslide dams
- social vulnerability assessment
- Disaster Risk Reduction

Centre for Transportation Systems (CTRANS)

- Urban Transportation Policy & Research
- Vehicle Technology
- Environmental Analysis of Transportation Systems
- Study on Alternate Fuel
- Pavement Management System
- Remote Sensing, GPS and GIS Applications in Transportation System
- Information Technology for Efficient Operation of Transportation System
- Optimization of Public Transport Operation
- Visual Communication & Design for Aesthetic & Comfort, Ergonomics

Centre for Nanotechnology

- Carbon Nanotubes and its application
- Modelling and Simulations
- Nanobiotechnology
- Nanocomposites and their coatings
- Photochemistry and Photo physics of nanomaterials
- Synthesis of Nanowires/ Nano colloids /Quantum Dots
- Thin Films and Nanostructures

Centre for Photonics and Quantum Communication Technologies

- Photonics
- Quantum optics
- Quantum Communication
- Quantum information and Computing

Mehta Family School of Data Science and Artificial Intelligence

- Data Science and Artificial Intelligence
- Machine Learning, Deep Learning and AI for Computer Vision & Image Processing
- Geospatial Technology
- Soft Computing, Essential Mathematics for A.I.
- AI and ML in Social Media and Finance Domains, App Design and AI/ML Integration
- DSS/Automated System Development
- A.I. based Hardware and Soft Tool Designs for imaging applications
- Bandit algorithms
- AI applications in water resources modelling
- Image Processing
- A.I for computer vision,
- Soft computing, Fuzzy Systems
- Theory of seismic wave propagation and scattering,
- Numerical Optimization
- Neural Architecture Search (NAS)

International Centre of Excellence for Dams

- Seismic Safety Evaluation of dams
- Sediment Management in Reservoirs
- Hydrologic Safety Evaluation of dams, Dam break, EAP etc.
- Geotechnical Safety Evaluation of Dams
- Hydraulic Safety Evaluation of Dams

- Hydraulic design of dams, spillways, and energy Dissipators
- Structural safety Evaluation of Dams
- Structural design of dams, spillways, and energy Dissipators
- Instrumentation in Dams
- Seepage through Dams
- Environmental issues in Reservoirs, barrages etc.

Centre for Space Science and Technology

- Design of antennas and microwave subsystems for space applications, Array signal processing
- Nuclear radiation detectors and Radiation induced effects in space materials
- Space & Atmospheric Physics, Space weather, Sun-Earth Interaction, magnetosphere-ionosphere energy coupling
- Commons, Space debris governance and management, Space Regulations, Outer space and Space economy
- Near Earth Space: Earth's Ionosphere, Mesospheric Chemistry and Dynamics, Atmospheric Gravity Waves
- Optical Instruments: Active and Passive Remote Sensing, Airglow Photometer, Airglow Imager, Airglow Spectrometer, Sodium Lidar
- Image Analyses: Allsky Imager, Optical and Thermal Image Processing
- Planetary Science: Investigation of the Atmosphere of Venus and Mars
- Atmospheric and Space Physics: Atmospheric Turbulence, Solar and Stellar Convection, Geo- and Astrophysical Turbulent Flows, Direct Numerical Simulations, Computational Fluid Physics, Magnetohydrodynamic Turbulence
- Molecular Modelling, Interstellar Chemistry, Polarimetric Radar based remote sensing, SAR image denoising, segmentation and classification, and SAR interferometry
- Guided elastic waves, Non-Destructive Evaluation, Finite and Spectral finite elements for elastic wave propagation
- Inflatable Space Structures, Space Deployment Mechanism, Composite and smart materials
- Mathematical Modeling

Center for Sustainable Energy

- Solar Photovoltaics
- Batteries And Super Capacitors
- Hydrogen Energy
- Waste to Wealth
- Smart Grid and Mobility
- Wind And Hydro Energy
- Energy Policy
- Theoretical Modelling

Centre for Indian Knowledge System

- Indian Mathematics and Astronomy
- Medicinal traditions in India
- Indian Architecture and Planning
- Economics, Management and Governance
- Psychology from Indian perspective, Yoga and Indian Linguistics

PLACEMENTS

IIT Roorkee has been a preferred destination for aspiring technologists from across the country for the past several years. In the last seventy-five years IIT Roorkee has produced many illustrious alumni, whose contributions at national and international levels have been significant. The alumni of IIT Roorkee are often sought after for coveted positions in the realm of business, academics, and research. IIT Roorkee consistently maintains an exemplary recruitment record. Our graduates and postgraduates have been selected by leading national and multinational corporations and research institutes.



Number of Companies Participated:
285

Number of Offers made: **1,246**

Number of International Offers: **15**

Highest Domestic package: INR **1.9 crore** per annum

Highest International Package: INR **1.06 crore** per annum

Past Recruiters



INTERNATIONAL RELATIONS

IITR has executed MoUs/Agreements with more than 170 international institutes/universities representing 39 countries of the world. Agreements for Student Exchange and Internships programmes have been signed with top ranked universities like KTH (Sweden), TUM (Germany), University of Tokyo (Japan), ANU (Australia), NTU (Singapore) etc. Joint/ Dual degree programs agreements have been done with some of the premiere global universities like Univ. of Alberta (Canada), Univ. of Strasbourg (France), AIT (Thailand).

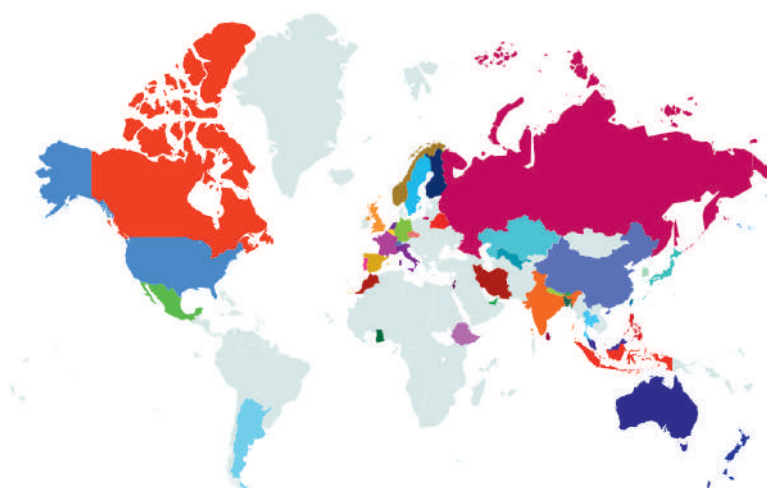
Internationalization Strategy

Primary focus on

Promotion of outreach (to train a broader spectrum of manpower) cross-cultural adaptability (to produce truly international scholars)

Modalities

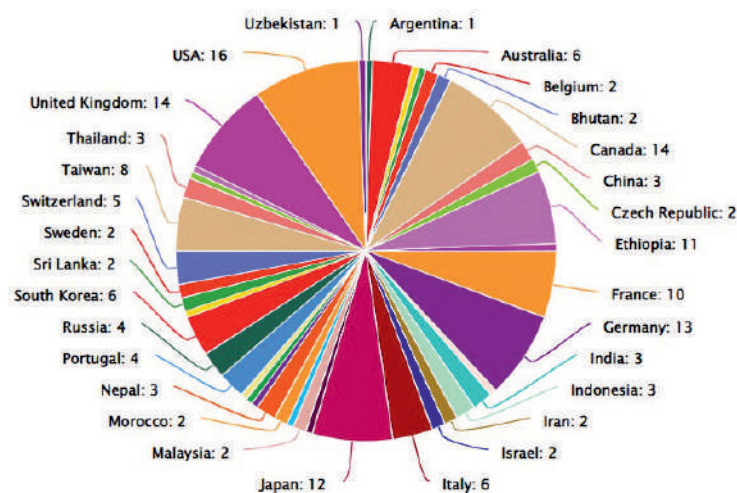
1. Strengthen admission of regular international students
2. Exchange programmes at all levels
3. Collaborative Ph.D. programmes
4. Schemes to Promote Internationalization
5. Networking partners, International staff meets
6. International faculty recruitment
7. Partnership with international funding agencies
8. Info Sessions, Promotions, Foreign Language Course
9. Support/Promotions for International/Joint Projects



International Networks

1. DST Africa initiative
2. Shastri Indo-Canadian Institute (SICI)
3. IC-IMPACTS
4. SATU Presidents' Forum
5. HERITAGE NETWORK
6. United States-India Educational Foundation
7. Japan Society for the Promotion of Science
8. Himalayan University Consortium
9. Finnish Indian Consortia for Research and Education (FICORE)
10. Russia India Network (RIN)
11. SAADRI Network

Our International Collaborations



Student exchange

- 1. Summer internship at IITR: SPARK Programme (<https://spark.iitr.ac.in/>)

- 2. Semester Exchange
- 3. Research visits

Faculty exchange

- 1. Research Collaborations (Labs/Field visits)
- 2. Adjunct/Visiting positions at IITR

Collaborative degree programmes (Joint/Dual Degree)

- 1. Master’s and PhD programmes with renowned institutes
- 2. Joint supervision in thesis/project work shall be a starting point

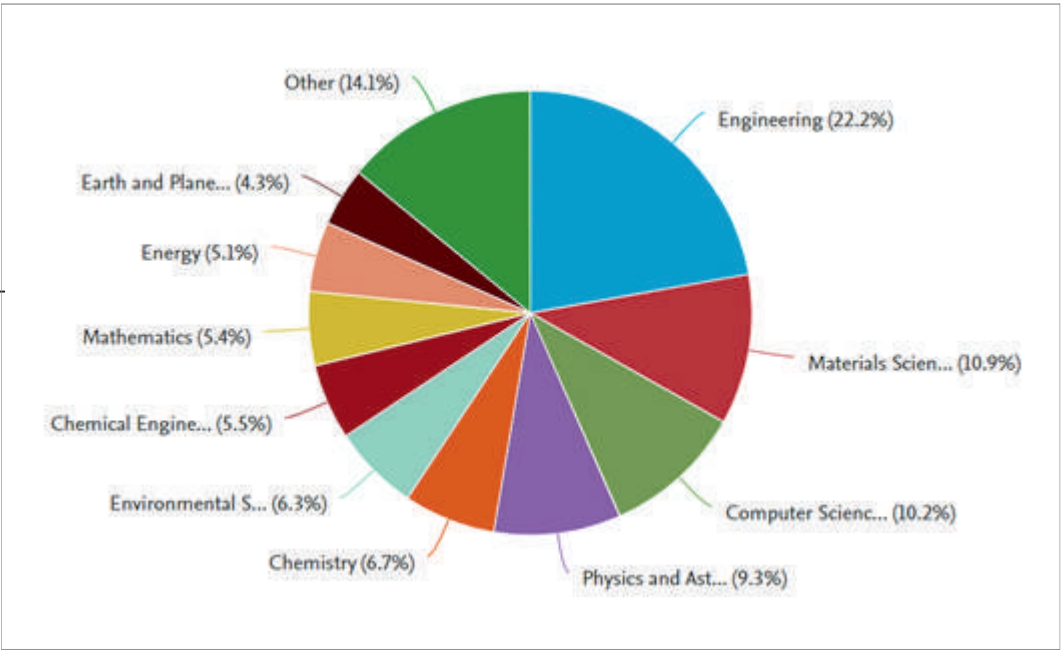
For all the above cases, financial support is available for inbound students and faculty members

Joint Doctoral Degree Programme Universities Specific

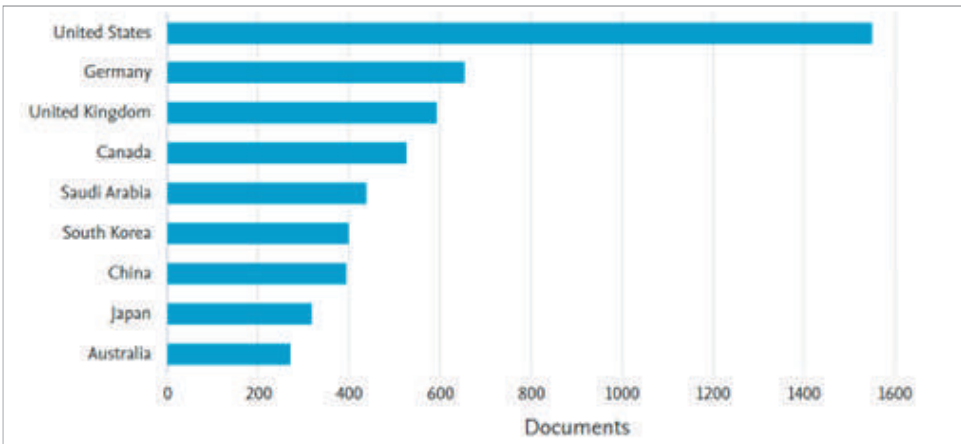
- 1. University of Alberta, Canada
- 2. University of Strasbourg, France
- 3. Asian University of Technology, Thailand
- 4. National Tsing Hua University, Taiwan
- 5. Institute of Engineering, Tribhuvan University (IOETU), Nepal

Student Specific

- 1. University of Groningen, - Dual Doctoral Degree Agreement
- 2. University of Ontario Institute of Technology, Canada



IIT Roorkee's various subject publications from 2002 to 2024



IIT Roorkee's various publications with different countries from 2002 to 2024.

IT Roorkee is organizing Institute-funded SPARK fellowships for internships with a weekly stipend of Rs. 2500/- week and project-funded internships in 2023 <https://spark.iitr.ac.in/>

Internship/Scholarship Programmes at Foreign Institutes for IIT Roorkee students under agreements

- 1 Future Research Talent, Australia
- 2 NTU-India connect Research Internship programme
- 3 Technical University of Munich (TUM), Germany
- 4 Niigata University (NU), Japan
- 5 DUO-India Fellowship Programme
- 6 Ecole Polytechnique University, France, Internship Programme
- 7 International Youth Exchange Programme (IYEP)
- 8 Lucerne University for Applied Sciences and Arts, Switzerland
- 9 VSB-Technical University of Ostrava, Czech Republic
- 10 Research Internship Programme at Yale University, USA
- 11 University of Tokyo, Japan
- 12 Semester Exchange at Chang Gung University
- 13 Exchange program at NTU, Taiwan
- 14 Exchange program at ESTP, France
- 15 Shastri Indo-Canadian Institute, Canada
- 16 Exchange program at ESTP, France
- 17 Centre Franco-Indien Pour la Promotion de la Recherche Avancee (CEFIPRA)
- 18 Commonwealth Scholarship Commission in the UK
- 19 DAAD Working Internships in Science and Engineering (WISE)
- 20 Deutscher Akademischer Austauschdienst (DAAD) German Academic Exchange Service
- 21 EuRoPeAn Community Action Scheme for the mobility of university student
- 22 Heritage Network, Europe
- 23 Newton Bhabha Fund PhD placement Programme
- 24 Charpak Exchange Scholarship
- 25 Horizon Europe's Marrie Curie Postdoctoral Fellowship
- 26 Mitacs Globalink Research Internship
- 27 Amgen Scholars Program at Kyoto University, Japan
- 28 Charpak Lab Scholarship
- 29 QUAD Fellowship Program
- 30 Eiffel Scholarship Program of Excellence
- 31 Australia India Research Students Fellowship Program
- 32 Engineering Summer Education Program, Tokyo
- 33 United States-India Educational Foundation
- 34 Japanese Government (MEXT) Scholarship
- 35 K.C Mahindra scholarship for Postgraduate
- 36 Global Korea Scholarship
- 37 Turkey Scholarship
- 38 Think Swiss Research Scholarships 2023
- 39 Khorana Program for scholars
- 40 TIGP-IIP summer Internship Program, Taiwan
- 41 Commonwealth Split-site PhD Scholarship

ALUMNI NETWORKS

Institute has launched a Global Network of IIT Roorkee Alumni to establish an extensive connection with its large number of alumni spread all over the world.

1. IIT Roorkee has approx. 46,700 verified alumni profiles on the Global Network of IIT Roorkee Alumni.
2. The Alumni office has so far issued '11622' "IIT Roorkee Global Alumni Card" to alumni.
3. Ten alumni have won Padma awards and 25 have won the Shanti Swarup Bhatnagar Prize for Science and Technology.
4. The institute has produced seven Chairmen of the Indian Railway Board, Chairman of the Telecom Regulatory Authority of India, Chief of Delhi Metro Rail Corporation, more than a hundred secretary-level officers in the Government of India, two presidents of the Confederation of Indian Industry, Six Directors of IITs, and presidents of bodies related to engineers and scientists like the Indian Institution of Engineers, the Indian National Science Academy and the Indian National Academy of Engineering.
5. IITR Alumni featured in Forbes 30 under 30 Asia list 2022.



Jaiprakash Gaur
Batch of 1950
Ex-Chairman of Jaypee Group



Ashok Soota
Batch of 1964
Ex-President of Wipro Infotech



Dinesh C. Paliwal
Batch of 1979
President and CEO of Harman International Industries



Naresh Kumar
Batch of 1987
Chief Secretary of Delhi



Anil Kumar Lahoti
Batch of 1986
Chairperson, Telecom Regulatory Authority of India (TRAI)



Pankaj Kumar
Batch of 1987
Director (Offshore) of ONGC



Rajiv Kumar
Batch of 1990
Managing Director and Corporate Vice President at Microsoft India



Mukundan Ramakrishnan
Batch of 1988
Managing Director and CEO of Tata Chemicals Limited



Sanjay Swarup
Batch of 1987
Chairman and MD, CONCOR



Dr Papias Musafiri Malimba
Batch of 1999-2000
Fmr. Education Minister of Rwanda



Dr. Ajay Mathur
Batch of 1979
Director General of the International Solar Alliance (ISA)



Mr. Sanjiv Singh
Batch of 1980
Former Chairman of the Indian Oil Corporation (IOCL)

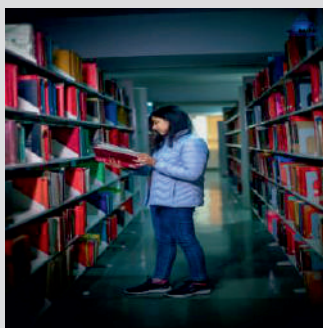
CAMPUS LIFE

The IITR campus provides a number of utilitarian amenities that make its students' lives on campus trouble free.



Library

Mahatma Gandhi Central Library finds a unique place in the academic library scenario in this part of the world. It is an amalgamation of the classic and the modern. While it is one of the oldest academic libraries in country, it is housed in an 80,000 sq. ft.



Sports

Physical recreation through games and sports has been an important part of the Institute since its inception. Games like football, cricket and hockey were introduced around 1870 followed closely by squash and boating.



Hostel Life

IIT-R treats its students like responsible adults and grants them ample freedom for exploration and enjoyment. When you are a hostelle-R, life for you is what you make of it during your stay here at IIT-R.

Athletics facilities

- A 400-meter running track
- Two gymnasiums
- Cricket, football, and hockey stadiums
- Volleyball and basketball courts
- Swimming pool
- Racquetball, squash, and tennis court



Himalayan Explorer's Club



The Mountaineering & Trekking Club founded in 1971 was the forerunner of the Himalayan Explorers' Club (HEC). Between 1971 & 1974 the Institute Sports Association nurtured the Mountaineering & Trekking Club which fostered all mountaineering, trekking, and outward-bound activities amongst the science, engineering, and professional student community of the Indian Institute of Technology Roorkee.

CULTURAL AND TECHNICAL EVENTS

Annual Fests of IIT Roorkee



Thomso – Cultural Festival



Connizance-Technical Fest



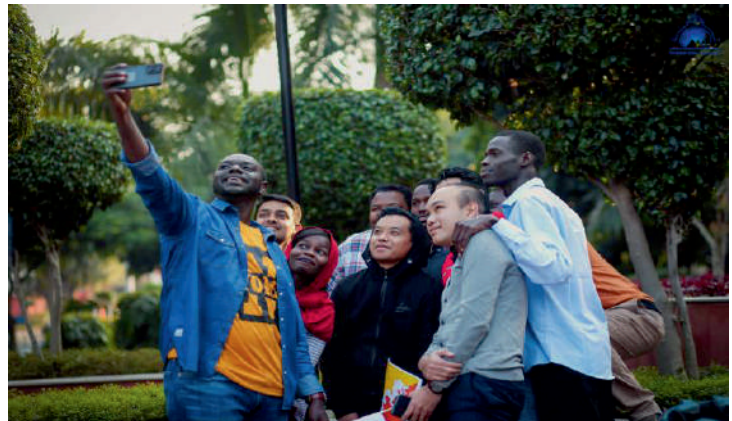
Sangram-Sports Festival



National Services Scheme (NSS)
Public Service Program



Esummit-Entrepreneurship Summit



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