

IITK-RISE Summer Internship 2026

Application Guide for Students

Program Overview

RISE @ IITK is a research internship program aimed at giving meritorious foreign students an opportunity to work closely with an IITK faculty.

The program has two modules – a 4-week virtual winter internship (held in December 2025) and a 6-8 week in-person summer internship between May-July 2026.

For the 2026 summer internship, a list of available projects from IITK faculty (along with eligibility criteria and other details) can be seen at the end of this guide. Students can apply to the projects aligning with their interest by filling the application form.

Students who successfully completed the winter virtual internship 2025 will be given preference for the summer offline internship selection in 2026.

Duration of the IITK-RISE Summer Internship 2026: For 6-8 weeks between May to July 2026

Support

For the RISE @ IITK 2026 summer internship, IITK will provide up to 12 selected students with a monthly stipend of INR 15,000, accommodation on sharing basis for the duration of the internship and taxi pick-up from the nearest airport/station. Students will have to bear the costs of their travel to and from their home country/place of current residence, visa charges as well as food for the duration of their stay at IITK. Students will also have to arrange for their own health insurance.

Eligibility

- Applicants should be non-Indian nationals
- Must be enrolled in a bachelors or masters program at their Home University
- UG students should have completed at least four semesters and masters students should have completed at least two semesters (if enrolled in a 2-year program) or completed at least one semester (if enrolled in a 1-year program) before the beginning of the internship
- Students should have at least one semester left in their study after the internship at IITK
- Have a strong academic record and an interest in research
- Meet the requirements of the chosen project, as mentioned in the project list
- Should be comfortable with the English language

Application Procedure

Students will apply to this program only through the online application form (link at the end of the guidelines). Once the form is submitted, no changes can be made, so make sure to review carefully before submitting.

Please note that each student should only apply once. Multiple applications will be rejected.

Students can apply to a maximum of two (2) projects.

Documents Students will Submit During Application

1. Statement of Purpose (400 words max) that mentions your research interests and your motivation for participating in this internship
2. Updated CV (in no particular format)
3. Official academic records/transcripts from Home University (translated into English, if applicable)
4. Proof of nationality
5. Letter of recommendation (LOR) from a faculty/supervisor at the Home Institution/University. Should the faculty wish to email the LOR directly to us, they may do so by sending an email to oir@iitk.ac.in
6. Passport size photo

Students will be selected based on the documents submitted (see list under 'Application Procedure'). Faculty may also choose to schedule video interviews or any additional screening method.

Key Dates

Application Opens: 5 March 2026

Application Deadline: 20 March 2026 (5 p.m. IST)

Notification of Result: By the second week of April

Contact

For any queries, please reach out to Ms. Perna Gupta at oir@iitk.ac.in

Important Links

IIT Kanpur website: <https://iitk.ac.in/>

Office of International Relations, IITK website: <https://iitk.ac.in/oir/>

IITK-RISE Internship Program: <https://www.iitk.ac.in/oir/iitk-rise>

IITK-RISE Summer Internship Application Form: <https://forms.gle/zHbyisVnSqVPio368>

IITK RISE SUMMER INTERNSHIP 2026 - List of Available Projects

S.No.	Faculty Name	Department	Research Project/Area/Group	Description of research project/area/group	Webpage	Who can apply	Additional requirements for applicants (degree/knowledge/skill)
1	Nagaditya Poluri	Electrical Engineering	Microwave circuits and power amplifiers	Design of power amplifiers and microwave circuits	https://home.iitk.ac.in/~npoluri/	Both Bachelors and Masters students	
2	Amar Kumar Behera	Design	Robotics, Smart Manufacturing, Product Design, Industry 4.0, Virtual Reality, AI/ML	Smart Manufacturing and Intelligent Learning Systems Lab	https://home.iitk.ac.in/~amarkb	Both Bachelors and Masters students	
3	Parthasarathi Subramanian	Chemistry	Synthetic Organic Chemistry- Isolation and synthesis of Natural Products	Our group focuses on synthetic organic chemistry through the development of novel strategic designs for the synthesis of biologically relevant molecules. The structural complexity of incredible natural products and their appealing biological properties inspire synthetic chemists to design creative approaches to circumvent challenges in molecular synthesis. Our research theme includes new synthetic and catalytic methodologies to design novel strategic approaches for the expedient total synthesis of bioactive natural and unnatural molecules	https://sites.google.com/view/parthasarathi-lab/home?authuser=0	Only Masters students	Prior knowledge of column chromatographic techniques and handling for compound purification
4	Somesh K Mathur	Economic Sciences	Simulations in Econometrics and International Relations	The impact of trade wars on Economies across the world: Use of Global Economy Models	https://iitk.ac.in/new/data/cv/Somesh-Mathur-CV-2025.pdf	Both Bachelors and Masters students	prerequisites none
5	Prabodh Bajpai	Sustainable Energy Engineering	Energy Modelling and Decarbonization	The project aims to develop an integrated energy systems model (IESM) to provide an energy transition pathway for India's key high GHG emission sectors that require urgent decarbonization and hydrogen for decarbonization of power and allied sectors, like steel, fertilizers, and transportation as most sectors depend strongly on these two derived resources from multi-energy-vectors. The proposed IESM, an optimization model, will be based on costs and emissions constraints of various energy production technologies (e.g., concentrated solar thermal, PV, wind turbines, nuclear, biomass and fossil fuel combustion with carbon capture and storage) and energy storage technologies (e.g., battery, thermal storage, pumped hydro, Hydrogen). The model will consider India-specific conditions and resource constraints such as spatio-temporal variability (state and hourly resolutions) in solar and wind resources, emission constraints, technology cost projections, and the demand of hydrogen and power to determine the potential pathways that could be adopted for Net-Zero goals.	https://home.iitk.ac.in/~pbajpai/index.php	Both Bachelors and Masters students	Candidates motivated to work in renewable energy systems with Masters in Power systems or Energy systems or Power electronics and Bachelors in Electrical Engineering may apply. Experience with the knowledge of modeling and simulation of energy systems and willingness to work with real power and energy system and power electronic circuits are desirable.

6	PM Mohite	Aerospace Engineering	Load Bearing Stealth Composites	The proposed work aims at developing and designing the composite material which is both capable of Radar absorption and load bearing. The study involves multi-scale analysis as well as multi-level optimization.	https://home.iitk.ac.in/~mohite/	Both Bachelors and Masters students	A candidate with good knowledge of polymer composite, mechanics and exposure to some commercial FE Packages will be preferred.
7	Tanmay Dutt Mathur	Aerospace Engineering	Dynamics of mechanically interconnected multicopter drive systems	UAV gearboxes for enhanced payloads	https://home.iitk.ac.in/~mathur/	Only Bachelors students	
8	Aditya Saurabh	Mechanical Engineering	Acoustics in gas turbine engines	Among several technological barriers in the development of gas turbine technology are those associated with acoustics and acoustic instabilities. Our lab is actively involved in developing know-how and solutions to acoustic problems in state-of-the-art and future gas turbine engines. The project will involve analysis of acoustic data from GT subsystem models developed in the lab via emerging artificial intelligence methods.	https://orcid.org/0000-0001-8960-6591	Both Bachelors and Masters students	
9	Aditya Saurabh	Mechanical Engineering	Acoustics in gas turbine engines	Our lab is actively developing methods and know-how to solve technical obstacles hindering the operation of existing gas turbine engines and development of future engines. The project will involve numerical simulations of flow and acoustics in acoustic dampers that ensure stable operation of combustors used in GT engines.	https://orcid.org/0000-0001-8960-6591	Both Bachelors and Masters students	
10	Nishchal Kumar Verma	Electrical Engineering	Artificial Intelligence		https://www.iitk.ac.in/idea/	Only Masters students	
11	Preeti Malakar	Computer Science & Engineering	Parallel programming	https://www.cse.iitk.ac.in/users/pmalakar/publications/	https://www.cse.iitk.ac.in/users/pmalakar	Both Bachelors and Masters students	Expert in C programming
12	Dasari L V K Prasad	Chemistry	Computational Chemistry and Physics of Materials	At the intersection of chemistry and physics, we explore molecules, minerals, and materials using theory and computation. Our focus includes electronic structure, bonding, lattice dynamics, phase transitions, and superconductivity. We also develop predictive tools for crystal structures and materials design, applying data-mining strategies within the materials-genome framework to guide synthesis.	https://www.iitk.ac.in/d-l-v-k-prasad	Both Bachelors and Masters students	
13	Mugundhan V	SPASE	Radio Astronomy, Instrumentation	We work on studying natural radio signals, from the sun into the far reaches of the universe!	https://mugundhan1.github.io/	Both Bachelors and Masters students	
14	Mousami Prasad	Management Sciences	Environmental impact, energy transition, industrial decarbonisation, climate finance / energy and climate change	I am currently engaged in project on steel Sector decarbonisation, assessing environmental Impact of biofuels, electricity decarbonisation, disaster preparedness	https://iitk.ac.in/mousami-prasad#research-interest	Both Bachelors and Masters students	Knowledge of energy markets

15	Rituraj	Electrical Engineering	Quantum and nano-photonics	Design of integrated photonic devices for application in sensing and photonic computing (AI accelerator).	https://home.iitk.ac.in/~rituraj/	Both Bachelors and Masters students	A knowledge of basic electromagnetism and/or quantum optics is preferred.
16	Arun K Saha	Mechanical Engineering	Fluid and Thermal Science	Thermal buoyancy from a hot mass in a quiescent fluid creates free convective flow with a non-dimensional Grashof number. If thermal buoyancy is far less than the inertial effect indicates a forced convective flow, characterised by Reynolds number. Mixed convective flow occurs when the two forces are similar in magnitude. It has steady flow or periodic vortex shedding depending on essential parametric variables. Maintaining flow in the active/suppressed vortex shedding regime controls heat transfer from the bluff body and forces acting on it. Mixed convective flows past heated bluff bodies are important in engineering because they occur in heat exchangers, machine equipment cooling, etc. Vortex shedding in flows past bluff bodies must be studied to minimize resonance, which causes prolonged, large-scale vibrations when the structure's inherent frequency matches the vortex-shedding frequency.	https://home.iitk.ac.in/~aksaha/	Both Bachelors and Masters students	Knowledge of fundamental fluid mechanics and heat transfer is desirable.
17	Kantesh Balani	Materials Science and Engineering	Biomaterials / High Temperature Ceramics	(i) Multi-functional materials for hip-joint applications, and (ii) Ultra high temperature ceramics for re-entry space vehicles.	https://home.iitk.ac.in/~kbalani/	Both Bachelors and Masters students	Knowledge of basic materials science.
18	Salman Ahmad Khan	Chemical Engineering	Computational Catalysis	ML models to discover active-site structure and activity in catalysts	https://home.iitk.ac.in/~salman/	Both Bachelors and Masters students	Experience with python will be helpful
19	Gurunath Ramanathan	Chemistry	Environmental Biochemistry	Cryo-EM structure determination of proteins, enzyme engineering and catalysis	https://home.iitk.ac.in/~gurunath/	Only Masters students	I can only accomodate 1 or maximum of 2 students.
20	Rajesh Ranjan	Aerospace Engineering	Aeroscience Computations & Analysis Lab	The project focuses on applying physics-based machine learning approaches, such as Physics-Informed Neural Networks (PINNs) and Physics-Informed Deep Operator Networks (PI-DONs), to a range of fluid-dynamical problems. We have developed a PINN framework called underPINN. The selected candidate will further develop and extend this framework to evaluate the capability of neural networks in addressing challenging problems, including vortex shedding, shape optimization, and biological flows.	https://home.iitk.ac.in/~rajeshr/	Both Bachelors and Masters students	Skills in Python coding, Computational fluid dynamics and Neural Networks
21	Amitabha Bandyopadhyay	Biological Sciences & Bioengineering	Osteoarthritis therapy; embryonic skeletal development	Osteoarthritis therapy; embryonic skeletal development	https://iitk.ac.in/bsbe/amitabha-bandyopadhyay	Both Bachelors and Masters students	Preferably science and/or engineering background
22	Animangsu Ghatak	Chemical Engineering	Soft material and interfaces	Project: Integration of Kirigami based metamaterial design with mechanics of thin sheets and soft gels for enhancement of mechanical and thermal effects	https://home.iitk.ac.in/~aghatak/	Both Bachelors and Masters students	Chemical / Mechanical Engineering students

23	Pradeep Moise	Aerospace Engineering	Aerospace Engineering	Large-eddy simulations of bubble breathing in transonic flows over airfoils	pradeepmoise.com	Only Masters students	Computational Fluid Dynamics
24	Prof. Tanmoy Maiti	Materials Science and Engineering	Thermoelectrics, Clean Energy, Perovskites	AI/ML- driven design of thermoelectric materials for clean energy generation from waste-heat	http://home.iitk.ac.in/~tmaiti/	Both Bachelors and Masters students	
25	Sudarshan Narayanan	Sustainable Energy Engineering	Next-generation Li-/Na-ion batteries	Nanostructured anodes for high energy density Li-/Na-ion batteries	https://home.iitk.ac.in/~sudarshan	Both Bachelors and Masters students	Degree in engineering/sciences with background in
26	Mohit Bhardwaj	SPASE	Astronomy & Astrophysics	Understanding the origins of Fast Radio Bursts (FRBs) and using them as probes of ionized baryons in the Universe.	mohit-bhardwaj.com	Both Bachelors and Masters students	Strong Python programming skills, a solid understanding of high-school level mathematics and statistics, and a keen interest in astronomy.
27	Nivedita Bhaktha	Management Sciences	Statistics and Survey Research	For methodological work the focus will be quasi-experimental designs and for applied research, the focus will be on answering causal questions in social sciences.	https://sites.google.com/view/niveditabhaktha/home	Both Bachelors and Masters students	Should be willing to work in R.
28	Dr Arvind	Mechanical Engineering	Metal 3D printing, FEA analysis in 3D printed parts, CFD analysis in 3D printed parts.	<ol style="list-style-type: none"> 1. Physics-informed machine learning for 3D printing design 2. FEA analysis of 3D printed sandwich deck for space launch vehicle application 3. CFD & Heat transfer analysis of 3D printed compact heat exchanger 4. FEA analysis of 3D printed NITI shape memory alloy component 5. Multiphysics thermo-mechanical simulation for aerospace power generation 	https://home.iitk.ac.in/~arvindkr/amsl/	Both Bachelors and Masters students	3D printing, Design software, FEA (ansys/comsol) / CFD software (ansys), ML.