

2025

ACCELERATING INNOVATION

IIT KANPUR'S
GROWTH ROADMAP



OVERVIEW

IIT Kanpur stands at the threshold of a transformative era, driven by an ambitious vision to redefine excellence in education, research, and innovation. To realize this vision, we aim to secure \$600 million in funding over the next three years - a bold step toward shaping a future-ready institution that fosters groundbreaking advancements and global impact.

This funding initiative is a collaborative effort, with 40% of the costs supported by the Institute and Government, 50% contributed by our alumni, and 10% from other donors, including corporate partners (CSR initiatives).

The investment is strategically allocated across three key pillars:

- **Infrastructure:** Expanding and modernizing academic and research facilities, student amenities, and cutting-edge laboratories.
- **Programs:** Strengthening faculty and student support through scholarships, fellowships, and academic excellence initiatives.
- **Key Focus Areas:** Advancing strategic domains such as AI, sustainability, healthcare, and deep-tech entrepreneurship.

The following sections of this document provide a detailed breakdown of each category, outlining specific projects, their financial requirements, and their long-term impact. Through this roadmap, we aim to ensure transparency, accountability, and strategic alignment with IIT Kanpur's mission of driving innovation and global leadership.

This vision is not just about funding - it is about creating a lasting legacy of innovation and impact. We invite alumni, industry leaders, and philanthropic partners to join us in this mission, ensuring that IIT Kanpur continues to lead as a world-class institution.

SHAPING THE FUTURE, TOGETHER.

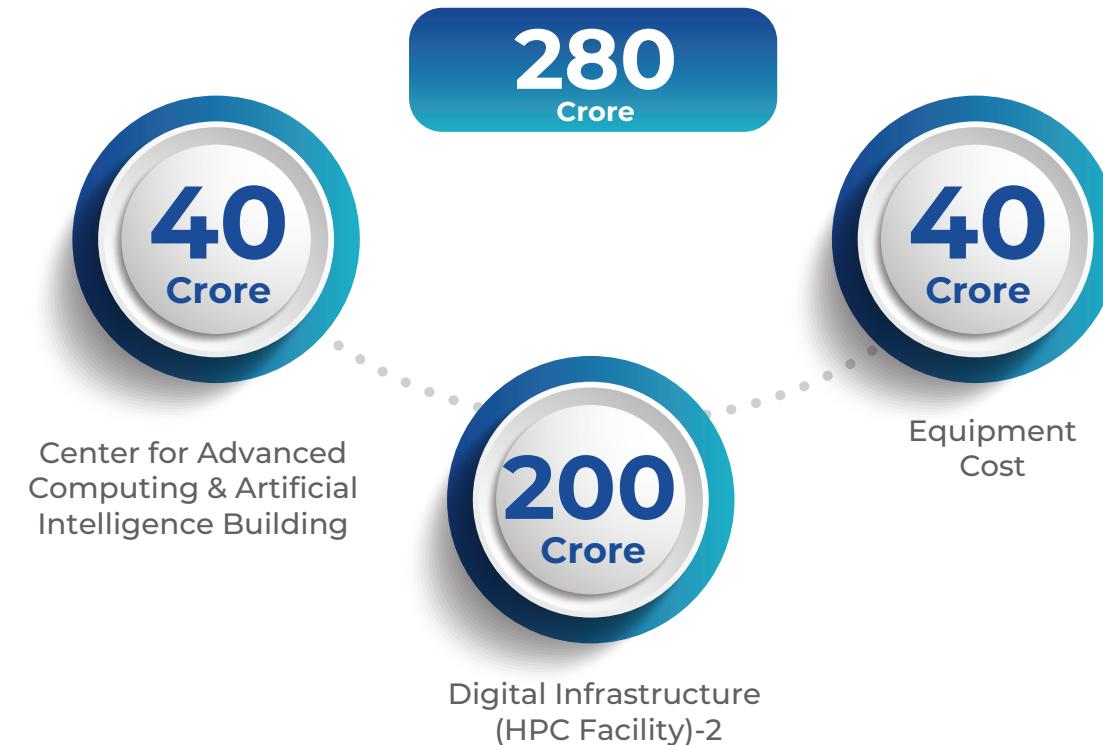
INFRA STRUCTURE

All listed costs are stated in Indian Rupees (INR).

CENTER FOR ADVANCED COMPUTING AND ARTIFICIAL INTELLIGENCE

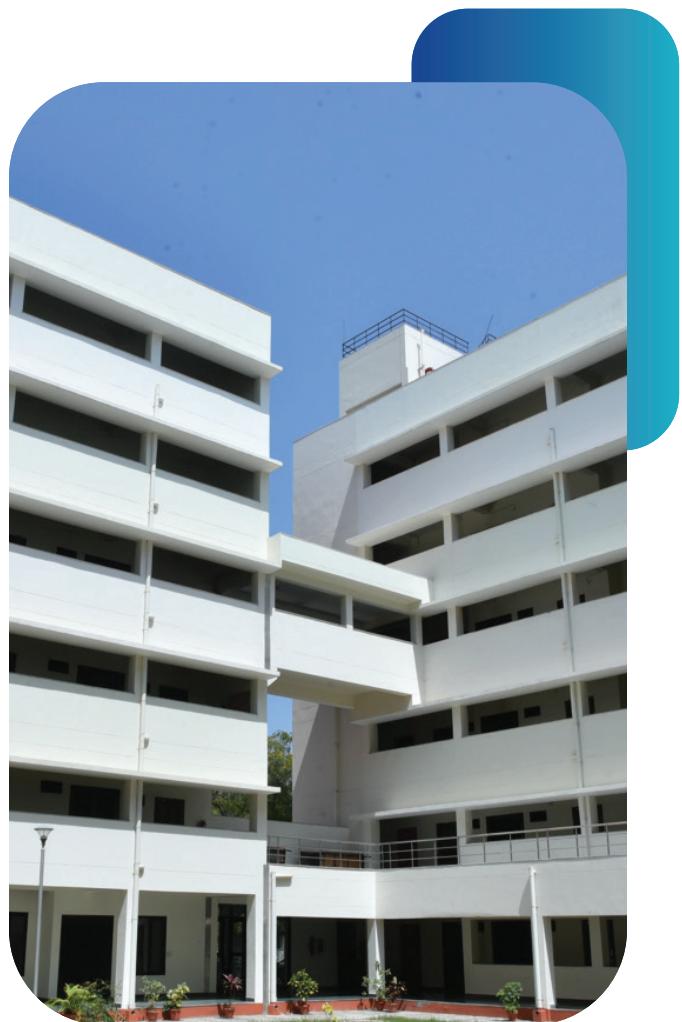
CAIAC aims to meet the rising demand for advanced computing and AI by providing high-end GPU resources and interdisciplinary expertise. It serves as a hub for training and research, offering Master's and Ph.D. programs, specialized courses for IIT Kanpur students, and an innovative e-Master's program for industry professionals.

Funding Requirements



RESIDENTIAL BUILDING

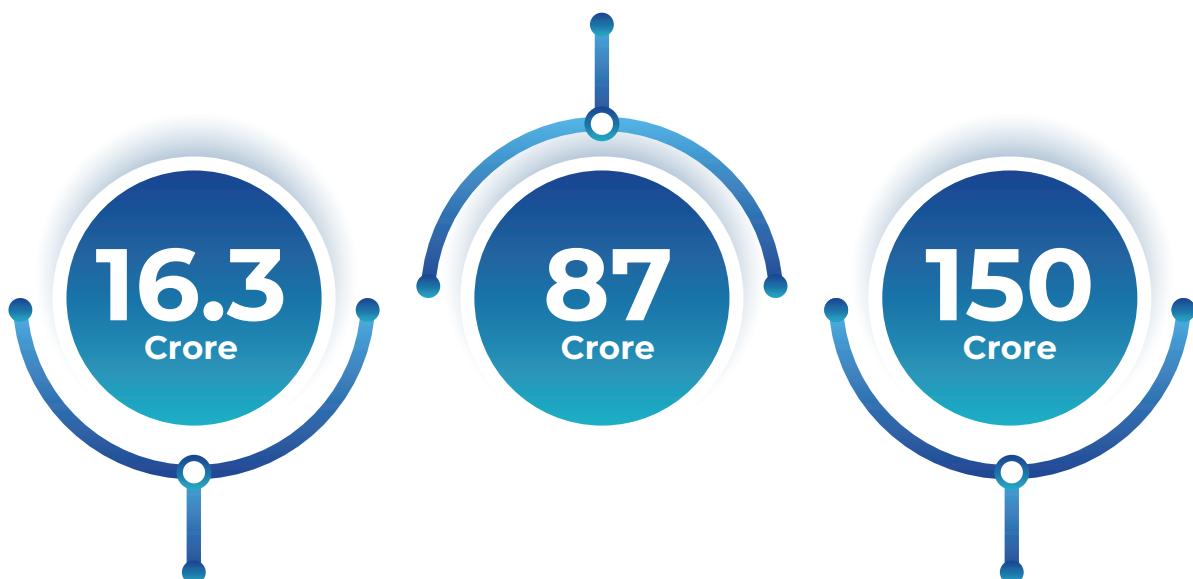
Expanding SBRA, hostels, and faculty apartments is essential for accommodating growing student intake, attracting faculty, fostering research collaboration, and enhancing campus life. On-campus housing ensures convenience, productivity, and sustainability while strengthening the academic ecosystem. It supports a vibrant community, reduces commute time, and promotes interdisciplinary engagement for long-term institutional growth.



Funding Requirements

254
Crore

Faculty Apartment,
Tower 2, 40 units each, G+10 Floors



SBRA (1 tower,
40 suits G+10 Floors)

Hostel (5 Towers, 3000 Students, G+10 Floors)

Tower (600 Students, G+10 Floors) - 30 Crore
Floor (60 Students, G+10 Floors) - 3 Crore
Wing (30 Students, G+10 Floors) - 1.5 Crore
Room (02 Students, G+10 Floors) - 0.075 Crore

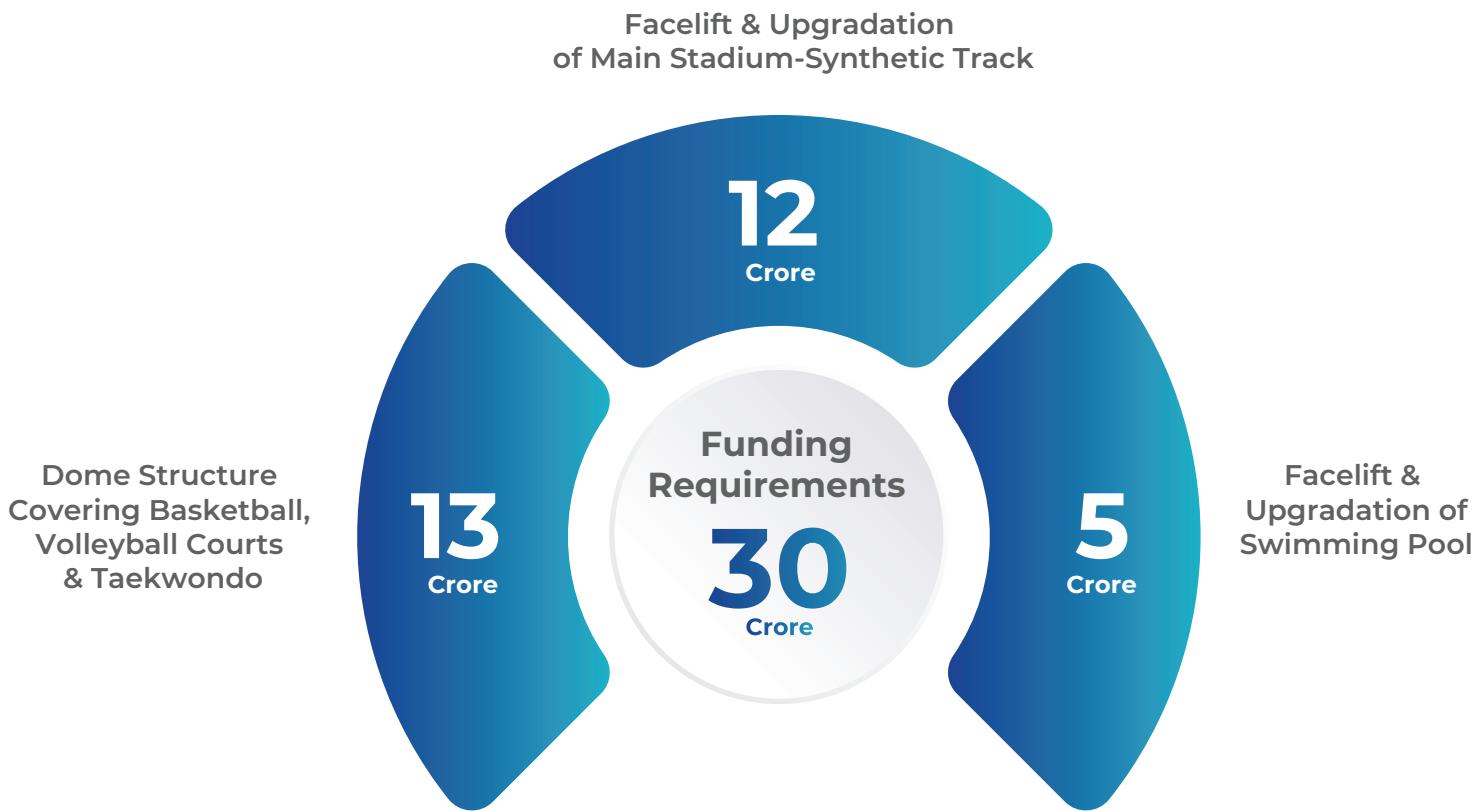
CAMPUS UPGRADATION

Enhancing the campus with an improved entrance and upgraded facilities with enhanced accommodation, dining, event spaces, childcare facilities, improved roads, recreational areas, and fitness amenities fosters a more inclusive and vibrant environment. These improvements enhance convenience, promote well-being, encourage community engagement, and create a welcoming atmosphere, supporting a higher quality of life for residents and visitors.



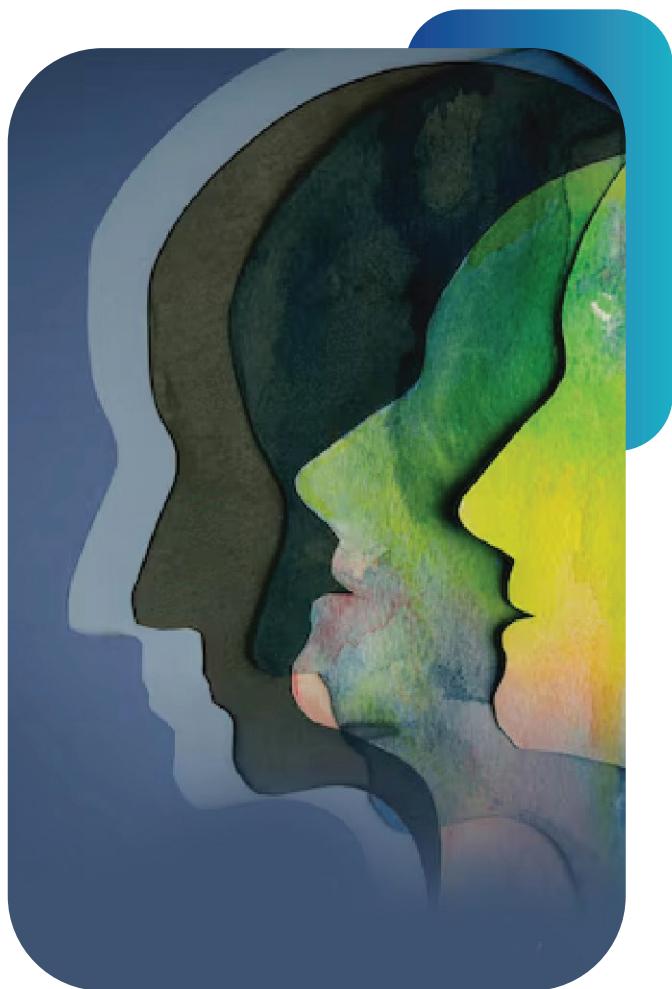
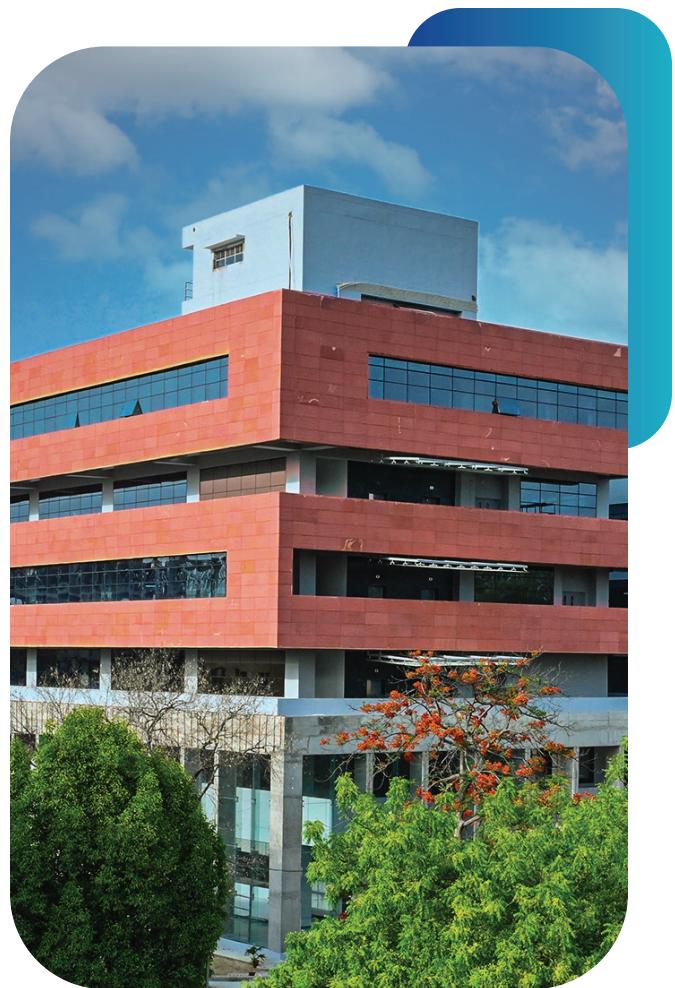
FACE LIFT & UPGRADATION OF SPORTS FACILITIES

Enhancing IIT Kanpur's sports facilities is crucial to meeting the increasing demand for diverse athletic activities and improving the overall sports experience. Upgraded infrastructure will boost performance, reduce injury risks, and ensure year-round usability. Modern amenities will support competitive athletics, nurture talent, and elevate IITK's standing in Inter-IIT and other events.



ACADEMIC BUILDINGS

Expanding lecture halls is essential to accommodate growing student intake, enable modern teaching methods, and support large-scale lectures, conferences, and workshops. Well-equipped spaces enhance learning, foster collaboration, and improve academic engagement. Upgraded infrastructure ensures efficient knowledge delivery, aligning with the institute's vision for academic excellence and future growth.



CENTER FOR MENTAL HEALTH & WELLBEING

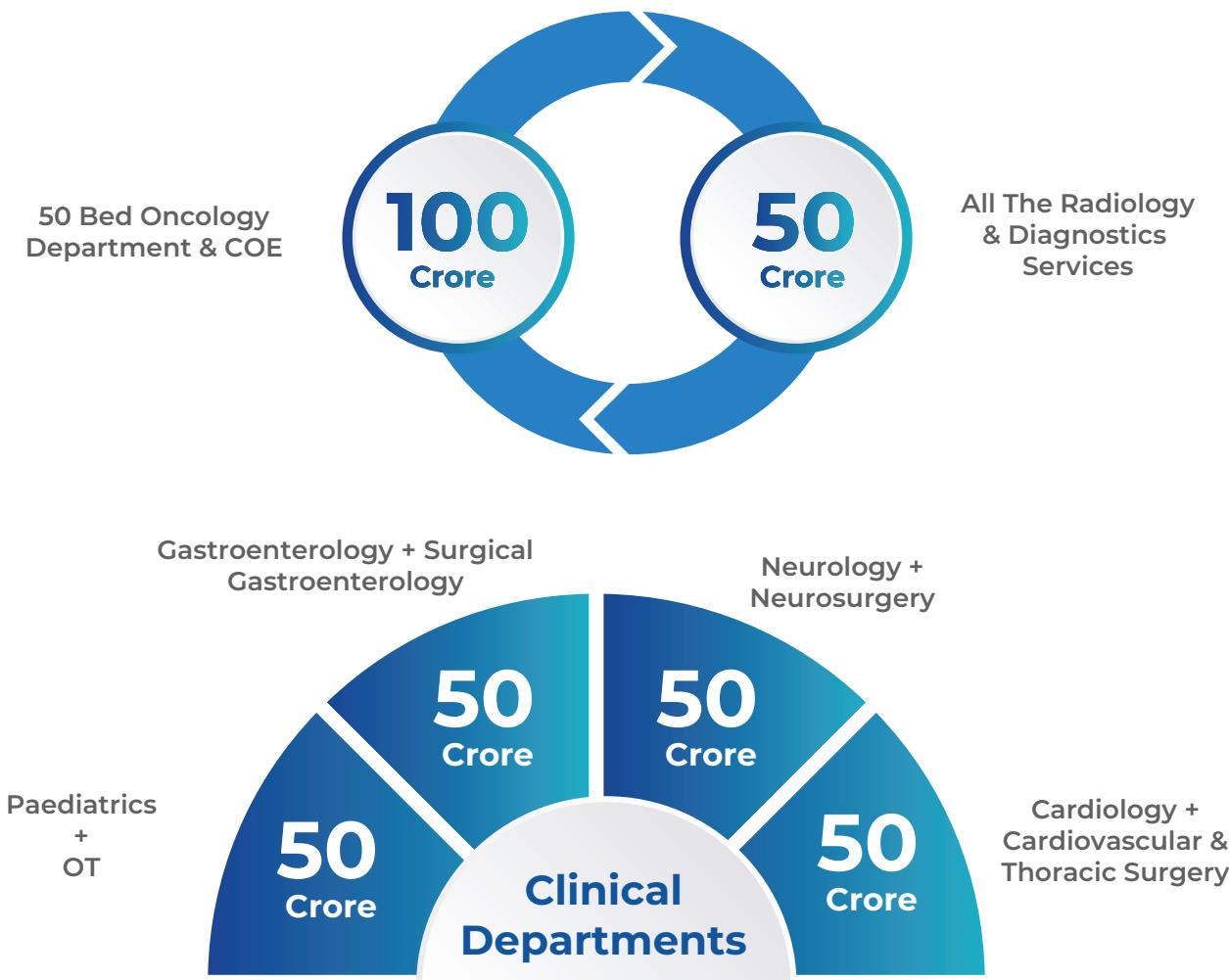
Ensuring mental health and well-being at IIT Kanpur is crucial with its growing community of over 10,000 students, faculty, and staff. The current facilities of the Institute Counselling Service (ICS) are inadequate to meet these demands. A modernized and dedicated system for mental health and wellness with expanded space, privacy, and specialized professionals is essential for comprehensive wellness support on campus.



Center for Mental
Health & Wellbeing

GANGWAL SCHOOL OF MEDICAL SCIENCES & TECHNOLOGY

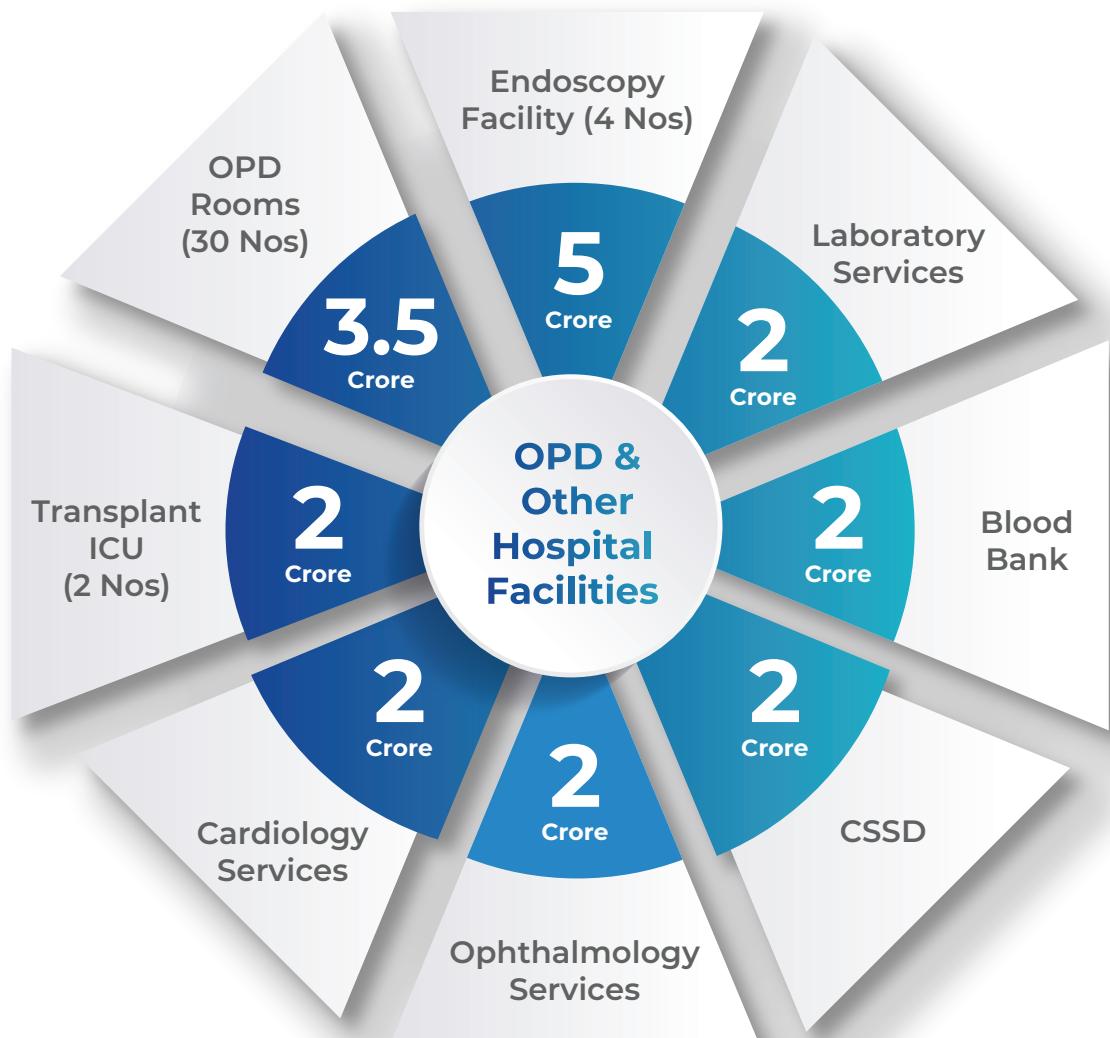
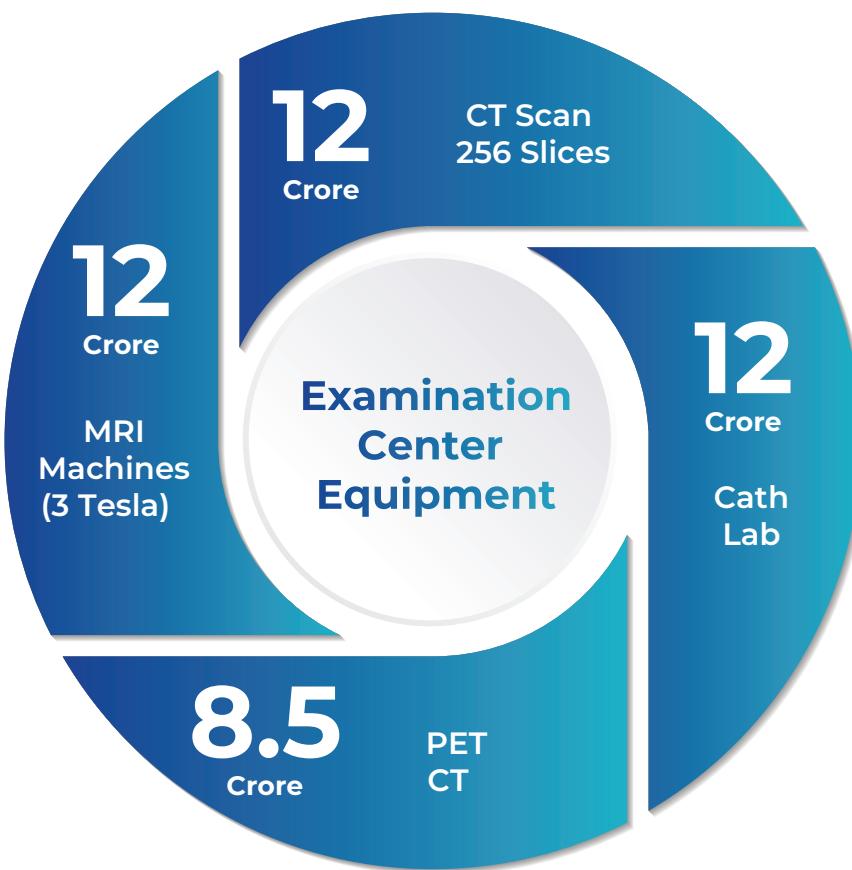
IIT Kanpur is establishing the "Gangwal School of Medical Sciences and Technology", to converge its technology and innovation competencies with medical sciences to catapult the Institute the league of global institutions that are driving advancements in human biology and healthcare through technology interventions. This will be achieved through eleven 'Centers of Excellence' on biomedical research as part of the School and a 500 bed Super-Specialty Hospital as an extension of these Centers.





Nurses Housing Blocks





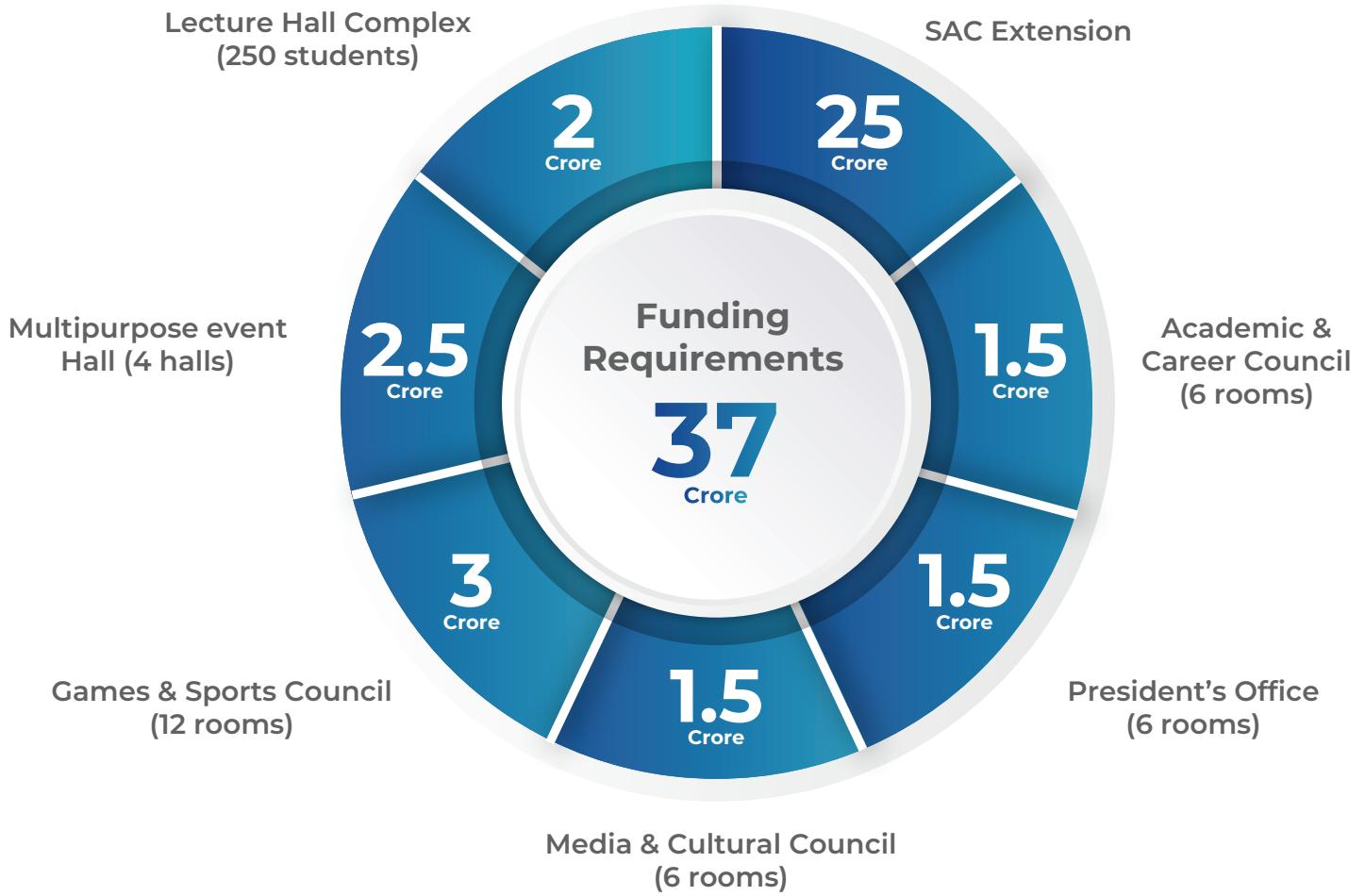


100
Crore

Therapeutics
(Center of Excellence)

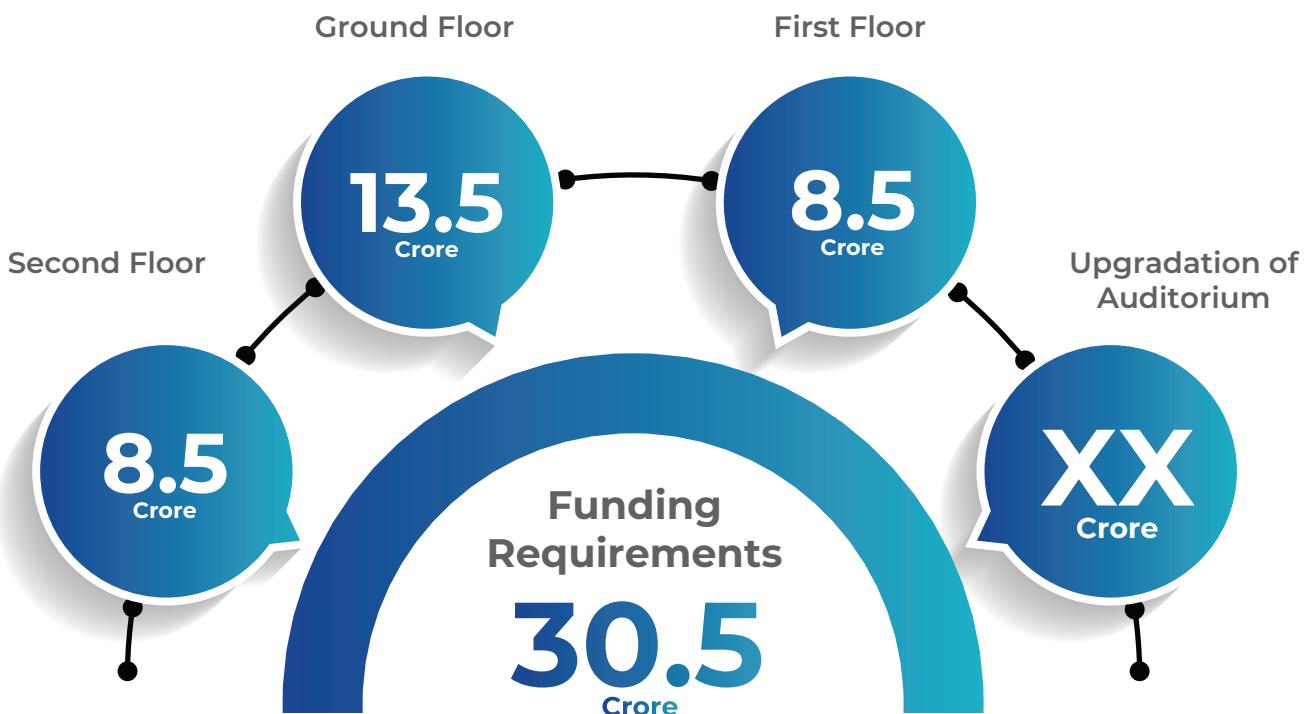
SAC EXTENSION

The construction of a new Student Activity Centre (SAC) is essential to support the growing number of extracurricular activities at IIT Kanpur. The existing infrastructure is inadequate for over 60 student clubs and organizations. A modern SAC will provide dedicated spaces, advanced facilities, and ample room to foster student engagement and holistic development.



CONVENTION CENTER

IIT Kanpur needs a world-class convention center to enhance its role as a global hub for innovation, research, and academia-industry collaboration. As a premier technological institute, it attracts scholars, researchers, and professionals worldwide. A state-of-the-art venue would enable the institute to host national and international conferences, seminars, and workshops, fostering knowledge exchange, interdisciplinary discussions, and industry partnerships. This facility would strengthen IIT Kanpur's reputation, provide a platform for thought leadership, and support its mission of advancing cutting-edge research and innovation.

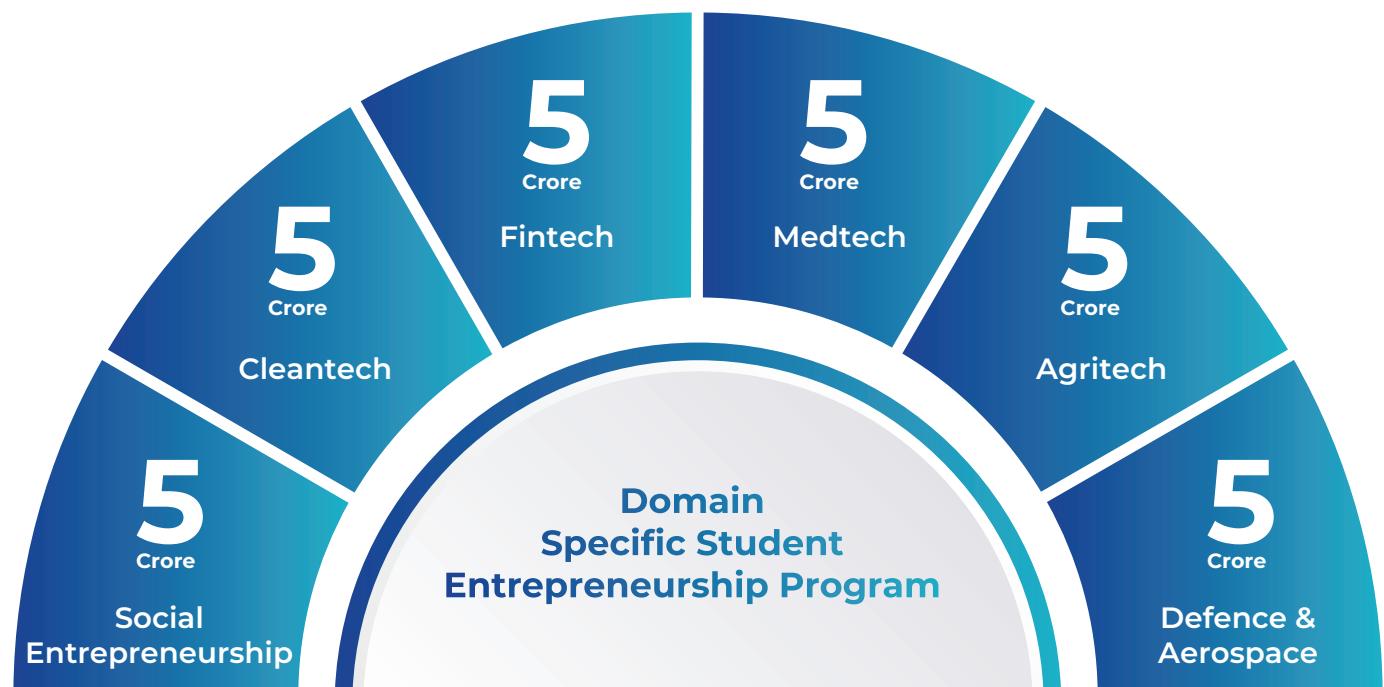


PROGRAMS

All listed costs are stated in Indian Rupees (INR).

INCUBATION & INNOVATION

IIT Kanpur's innovation and incubation programs will empower students to become entrepreneurial leaders by providing mentorship, funding, and infrastructure. Additionally, a CSR-driven model will support startups, fostering social impact and economic growth. These initiatives will bridge academia and industry, nurturing a vibrant ecosystem for innovation, commercialization, and sustainability.



OFFICE OF TRANSLATIONAL RESEARCH (IOTA)

The Office of Translational Research (OTR) will play a pivotal role in advancing technology development at IIT Kanpur. With over 80% of funds dedicated to supporting early-stage ideas and progressing innovations from TRL 4 to TRL 9, OTR will bridge the gap between research and commercialization. By fostering industry collaborations, it will accelerate market-ready technologies, strengthening IIT Kanpur's impact and positioning Kanpur and Uttar Pradesh as leaders in technological innovation.



Funding Technologies

Industry Collaboration



Manpower

Administrative cost



CERTEX

The Centre for Education Research and Teaching Excellence (CERTEX) is essential to enhance IIT Kanpur's teaching methodologies and adapt to evolving educational needs. It will provide a structured approach to address challenges like diverse student demographics, rising academic expectations, and innovative pedagogy, ensuring IITK remains a leader in education excellence.

Funding Requirements



Programs & Outreach Activities



Centre for Education Research and Teaching Excellence

FACULTY INITIATIVES

Faculty are the cornerstone of academic excellence, and IIT Kanpur invests in their growth through key initiatives. Programs like Young and New Faculty Fellowships attract top talent, while the High Research Initiation Grant helps new faculty launch impactful research early. Chair Professorships empower senior faculty to lead and mentor, and the International Faculty Chair fosters global collaboration. Together, these initiatives cultivate leadership, innovation, and strengthen IIT Kanpur's standing as a world-class academic institution.



Young Faculty Fellowship



Chair Professorship



Distinguished International Faculty Program



New Faculty Fellowship



High Research Initiation Grant



Scholarships



Travel Grants



Awards



Student Exchange Program
(for 3 months for 1 student- Travel & food)

STUDENT INITIATIVES

Students are central to IIT Kanpur's mission, and dedicated initiatives ensure their holistic growth. Scholarships and awards remove financial barriers and reward excellence, while travel grants support global exposure through conferences and competitions. Student exchange programs broaden perspectives by immersing students in international cultures and academic environments. These initiatives collectively foster academic excellence, creativity, and global readiness, empowering students to become future leaders, innovators, and changemakers.

KEY FOCUS AREAS

All listed costs are stated in Indian Rupees (INR).

QUANTUM TECHNOLOGY CENTER

The proposed Quantum Technology Center at IIT Kanpur (QTC@IITK) aims to drive innovation, industry-academia collaboration, and workforce development in quantum computing, sensing, and secure communication. The proposed center will be the first of its kind in the country, integrating essential hardware and software development units in one location to meet the multidisciplinary demands of quantum technologies.

Research Laboratories

Cold Atoms Facility

Ion Traps

Photonics in both Fibre
and Turbulent Atmosphere
Superconducting Qubit Facility

Optomechanical
Systems

Neutral-Atom Trapping
Systems

Quantum Chip
Laboratory

2D-Materials
Laboratories

Quantum Networks
Laboratory

59
Crore

Topological
Systems Laboratory





Quantum Technology Center Building

Facilities



Electronic
Design & Testing



Optical
Design & Testing



Cryogenic
Facilities



Microwave & Terahertz
Design & Testing



Computing Facilities
for Quantum Algorithms
& Control



Mechanical
Design & Testing



Class-1000 Clean
Room for Quantum
Device Fabrication



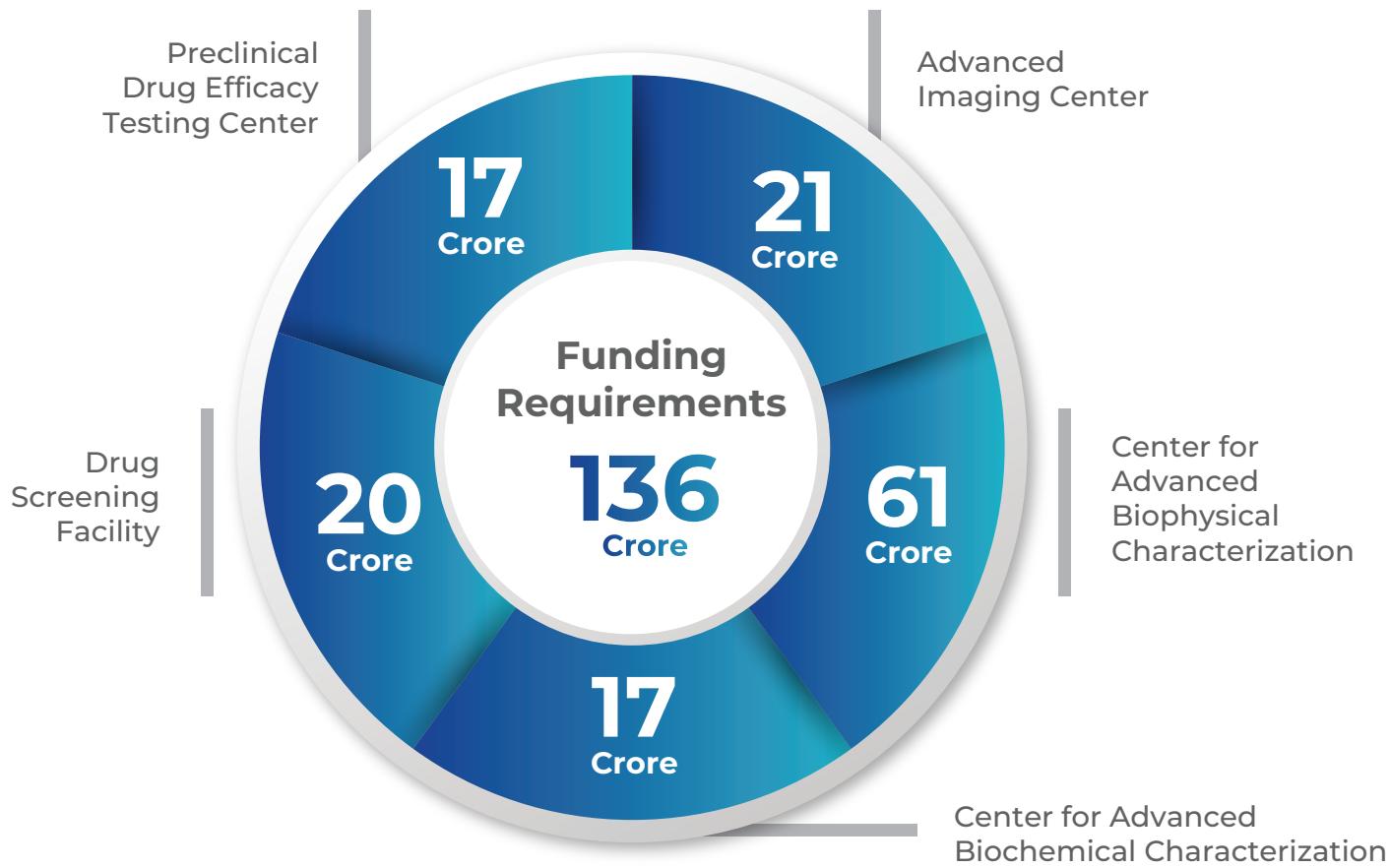
Quantum
Benchmarking
& Testing



High-end
Industry / Start-Up
Training Laboratory

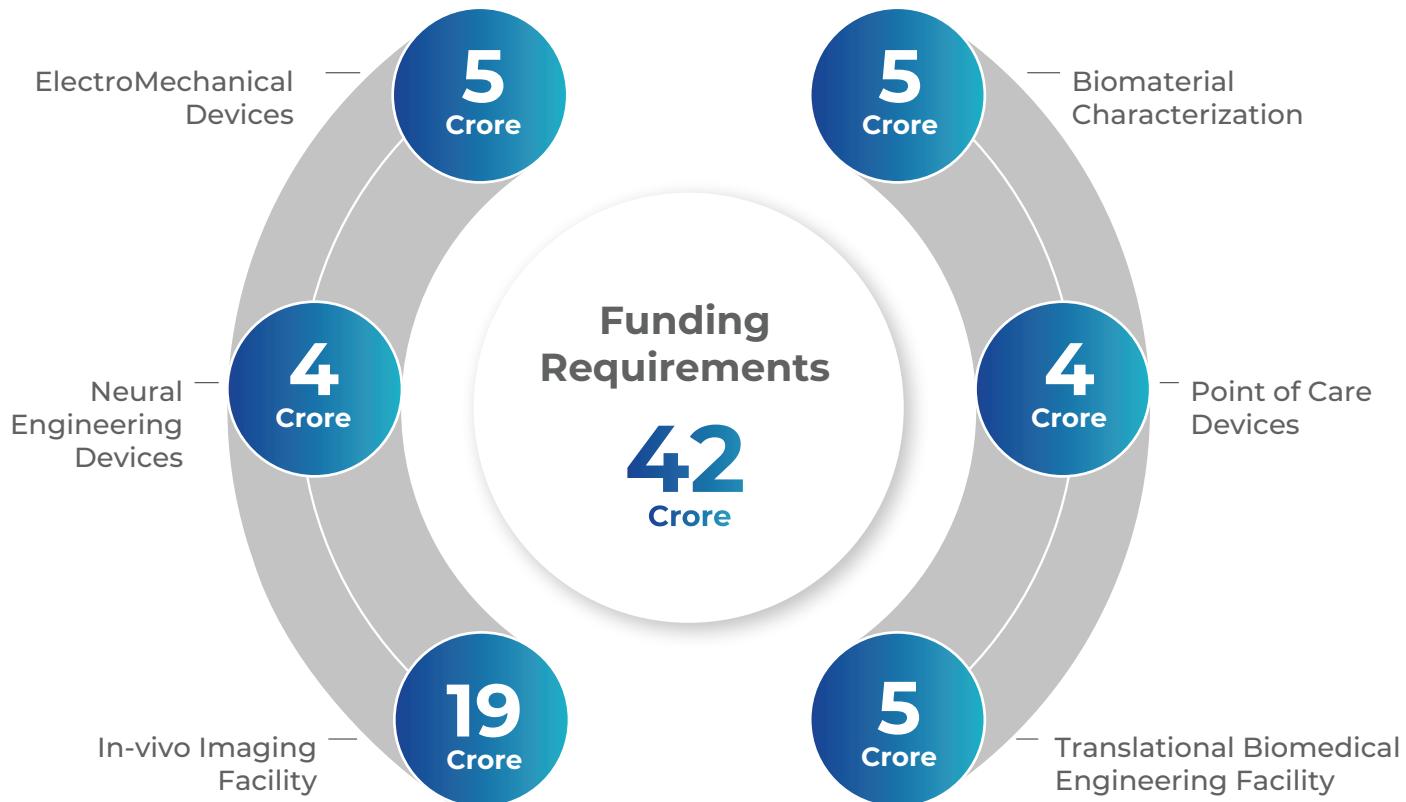
BUILDING AN INNOVATIVE DRUG DISCOVERY ECOSYSTEM AT IIT KANPUR

IIT Kanpur's drug discovery initiative bridges research and application by integrating genome analysis, bioinformatics, and disease modeling. It will address unmet healthcare needs, foster industry collaboration, and enable large-scale drug development, reducing costs and ensuring accessibility. Focused on cancer, metabolic, and neurodegenerative diseases, it aligns with India's growing healthcare demands.



MEDICAL DEVICES AND DIAGNOSTICS PROTOTYPING AND TESTING FACILITY

India's medical devices market, valued at \$11 billion, is set to reach \$50 billion by 2025, yet 80% of high-end devices are imported. Manufacturing is focused on low- to mid-tech devices, with gaps in high-tech production. IIT Kanpur aims to bridge this through innovation, prototyping, regulatory support, and workforce development. By fostering interdisciplinary collaboration across engineering, materials science, and healthcare domains, the facility seeks to generate innovative solutions tailored to India's healthcare challenges.



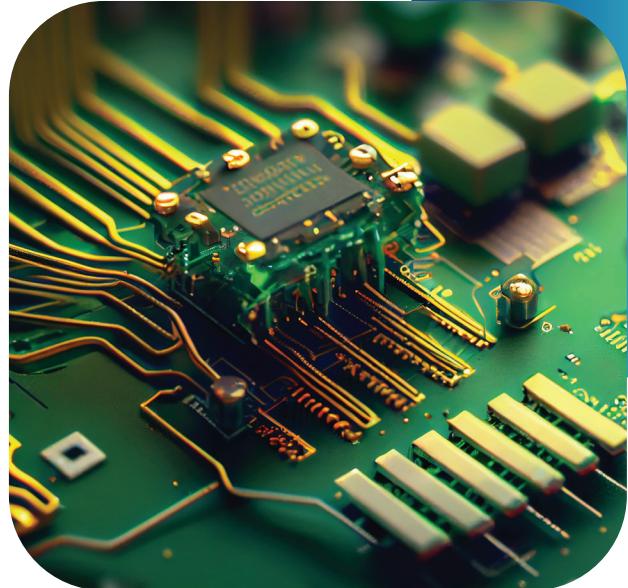
INTERNATIONAL FACILITY FOR FUTURISTIC MECHANICAL ENGINEERING RESEARCH

Mechanical engineering at IIT Kanpur is evolving into frontier areas like AI-driven robotics, space manufacturing, and battery technology. To stay ahead, a proposed International Facility for Futuristic Mechanical Engineering Research will support cutting-edge R&D, attract top talent, and enable impactful collaborations. Focus areas include ultra high-precision manufacturing, material testing in extreme conditions, advanced imaging, battery design, semiconductor manufacturing, and intelligent robotics—addressing India's critical and future technological needs.



CENTER OF EXCELLENCE FOR SEMICONDUCTOR PACKAGING

The semiconductor industry is rapidly growing, driving demand for skilled professionals, especially in advanced packaging. To meet this need, a Center of Excellence for Semiconductor Packaging is proposed at IIT Kanpur. It will focus on R&D, training, and industry collaboration, supporting India's push for OSAT plants and strengthening domestic capabilities in this critical sector.



STEPP- SCHOOL OF TECHNOLOGY, ECONOMICS, AND PUBLIC POLICY

The traditional public policy paradigm is undergoing a significant transformation driven by technological advancements, climate change, sustainability concerns, and geopolitical shifts. India's ambition to become a developed economy necessitates innovative and technologically informed public policy. The proposed School for Technology, Environment, and Public Policy (STEPP) aims to offer interdisciplinary education and research in public policy, integrating technology, economics, and sustainability. It will address key areas like climate change, digital governance, and defence policy, fostering collaboration and shaping impactful, tech-driven policy solutions at national and global levels.

