

UNDERGRADUATE ADMISSION BROCHURE





IIT Palakkad and Education

The Indian Institute of Technology Palakkad (IIT Palakkad), established in 2015, is one of the third generation IITs in India. As the (5,3) torus knot, the cyclic form rendered in a continuous single line in our institutes' logo symbolises, the IIT Palakkad community strongly believes in the process of continuous evolution.

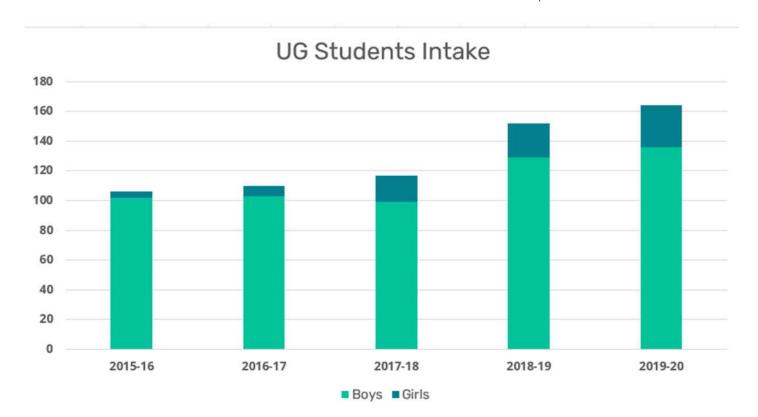
Plurality and Inclusiveness

IIT Palakkad opened its doors to the first batch of 106 students in 2015 and five years later we are very happy to welcome you to a campus that is diverse and inclusive across ethnicities and gender groups. Currently, 543 undergraduate students reside in the campus with 467 boys and 76 girls. The yearly intake of undergraduate students rose to 164 for the 2019 batch students.



UG enrollments since 2015

649



Holistic Educative Culture at IIT Palakkad



IIT Palakkad provides students a world of opportunities to stand out in the crowd and to discover themselves in the process. Our perception of education is broad, multidisciplinary and holistic; it focuses on academic training, provides platforms for co-curricular activities, hones life skills, organisational and leadership skills and prioritizes mental, physical and environmental health.

Some Highlights

- Extra Mural Lectures (EML) with distinguished speakers including journalists, artists, green activists, high rank army personnel, magicians, performing arts professionals, acclaimed mridangam players.
- Periodical Public Lectures and Institute Colloquium on different topics of contemporary interest by internationally acclaimed scientists and intellectuals.
- Gender sensitisation programmes by Kadambini – the women's forum of IIT Palakkad.
- Conducting activities via bodies like NSS to impart and hone Life skills.
- Helping students cultivate management, organisational and leadership skills via active participation in many of the institute's committees and student-run clubs.
- Supports students' involvement and active participation in sports, arts and other co-curriculars.





Academics

We invest strongly in the notion of synergy and a dynamic inter-relationship between research, theory and practice in academics which also reflects in our curriculum. Having immense respect for the ethics of human curiosity - the desire to question, explore and contribute to the process of knowledge building, we consider our young, dynamic and innovative students as our active co-explorers in our quest for knowledge.

In addition to the theoretical foundations offered by several of our courses we encourage free thinking, nurture creativity and help develop an innovative spirit.

Realising the essential and indelible role of technology in the functioning of the world and the ever-changing technology landscape today, we strive towards

- > Training our students to meet the technical human resource requirements.
- > Strengthen their knowledge fundamentals so as to prepare them to adapt to changes quickly and to be at the forefront of technological innovations.
- > Creating intellectually responsible, successful and socially-aware individuals.



I am a faculty in Chemistry discipline.
That has never stopped me from taking up innovation projects that have heavy engineering components.
I love to interact with students and give them my perspective. Innovation doesn't know any disciplines.

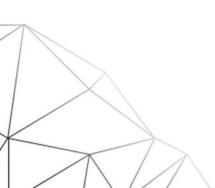
Dr. Dinesh Jagadeesan, Assistant Professor, Chemistry Discipline.

What Makes Us Unique?

- A well-crafted curriculum that incorporates a balance of research, theory and practice.
- With a predominant percentage of faculty being young, who in general are more open to change, makes it easier for us to implement the numerous progressive elements in the NEP 2020 (National Education Policy).
- Fosters a culture of interdisciplinary and multidisciplinary approaches among Engineering, Science and Humanities & Social Sciences.
- Impressive faculty-student ratio of 1:10 and smaller classes enable lively and interactive classroom sessions.

- The courses offered by Mathematics and Science departments help students ease into engineering and help them in their higher semester core courses.
- A vibrant Humanities and Social Sciences stream committed to active engagement in interdisciplinary areas of teaching and research enables students to humanize the diverse scientific and engineering problems they encounter.
- Fully functional academic environment with wellequipped laboratories, class rooms and computing facilities, auditorium, hostels, and sports & fitness amenities.
- Away from the hustle-bustle of city life but well-connected

- The first year mathematics courses spend a substantial amount of time on developing logical thinking skills, skills that are crucial for any career option.
- Our active involvement in a range of outreach programs and social initiatives which include our residential science camp for secondary school students, teaching activities arranged via the NSS unit of the institute in local schools, and more recently our COVID-19 related projects.
- Campus set in a beautiful, natural and scenic environment makes it appropriate for the residential academic community.





OELP is a very bold initiative that lets you have a full semester to work on a project while not compromising academics. The fact that it is mentored by a faculty of your choice helps to stay positive and achieve your goal.

Immanuel Jufel Dalmaida. A, EE Undergraduate, Class of 2021.

OELP (Jan-Aug 2020): 33 Students took varied projects that covered areas from:

- Thermal Conductivity Measurement
- Ultrasound Image Analysis
- Wireless Communication
- Internet of Things (IoT)
- Vehicle Crash Barriers
- Autonomous Robots
- Machine Learning

Parichita Das, CSE Undergraduate, Class of 2023.

Innovation lab projects are a great way to achieve that platform where we can implement our ideas with hands-on experience. Not just exploring already developed interests, but also finding new ones in different fields. 99



STUDENT-RUN CLUBS AND OTHER BODIES

Students are active participants in all aspects of the institution (academic as well as extracurricular).

IIT Palakkad nurtures several student-run clubs that help students forge great relationships, pursue a particular interest, encourage healthy discussions, celebrate culture, or simply have fun!

We have around 7 cultural clubs, 3 technical clubs and several other independent bodies.

Giving utmost importance to the well-being of our family, we are well equiped with resident psychologists, sexual harassment cell, anti ragging cell as well as a tie-up with YourDOST - Online Counseling & Emotional Wellness Coach.

OBT (Outbound Training) and other training sessions, sports facilities, a well-equipped gym and yoga sessions are also a part of our dynamic campus life.

CULTURAL CLUBS







Literary club Film Making Club Drama Club







Music Club

Dance Club



Photography club

TECHNICAL CLUBS

Coding Club

Robotics Club



Data Analysis Club

OTHER INDEPENDENT BODIES



The Fleet Street-Student media body



Kadambini- The Women's Forum



Alumni Cell

Adventure and Trekking Club



Exposure to Co-curricular Activities

The sports club brings together beginners as well as those who are already engaged in sporting activities, be it football, cricket, badminton or athletics. We regularly play on campus and participate in various sports competitions within and outside the institute. Our alumni and current students have won prizes in several competitions, including the inter-IIT competitions.

Our technical clubs help to take learning outside the classroom. They create a fun peer-driven environment of knowledge sharing by providing hands on experience in various projects. They also prepare you to take part in various technical fests and competitions such as the Inter IIT Tech fest, ICPC, Smart India Hackathon and the list goes on.

Innovation at IIT Palakkad is given prime importance. The Innovation Cell is equipped with all the necessary infrastructure and brain power to support, guide and prepare you for independent pursuits. The stage is set for you to bring your ideas to fruition. Is there something that interests you which is missing here? The Student Council is always ready to help you and you are more than welcome to start a new culture.







Emphasis on Overall Development

- ♦ Extra Mural Lectures
- Institute Colloquium
- Student Affairs Council
- Student Wellness Centre

We, at IIT Palakkad believe in imparting not only technical knowledge but also in fostering qualities which enable you to bravely face the challenges ahead in life. You'll meet people from all over the country, learn, explore and surely find yourself improved by the end of it all.

Aimed at broadening the students' knowledge, Extra Mural lectures prepare you on topics far beyond the curriculum and also provide you with an excellent opportunity to interact with eminent speakers from different walks of life.

Also, we want you to challenge yourselves, explore

new ideas and develop an avid interest in the cultural and scientific aspect of the world we live in. It is with this idea in mind that we organise the Institute Colloquium and the Pale Blue Dot series (Organised jointly with Palakkad District Library and UBA). Thus, you get to meet and learn from distinguished academicians and industrialists, in the country.

The Student Affairs
Council(SAC) elected
democratically by the students
themselves, serves as the best
medium to instil confidence and
leadership qualities within you.
What beats learning teamwork,
patience and responsibility all
while acting as a link between

your friends and the institute. Moreover, you learn the must needed organisational skills by organizing various regional festivals like Onam and Diwali in the institute.

In addition to all these we also value your mental health and well-being. The presence of the Student Wellness Centre is one way for us to ensure that you always find an experienced professional if you need any help in the matter and thus, never find yourself alone.

Thereby, you are prepared for the life ahead, through a series of activities and events that are bound to be to your liking!







for anything I want to be. Be it a robotics enthusiast, or be a part of our students' fest. It has been a great experience and I believe that the institute will present you all the opportunities - you can even start from a blank slate!

Muskaan Maheshwari, EE Undergraduate, Class of 2021, Club head - The Robotics Club, Technical Head, Core team member- Petrichor.

"I am not what happened to me,
I am what I choose to become."

- Carl Jung

Anand Kumar Sharma, CE Undergraduate, Class of 2021, Secretary - Music club.

I used to be a shy guy who had stage fear from my school time but deep down I knew that I had talent. Vadya Music Club gave me a platform to show my talent to all the people around me and to nurture my leadership skills as I eventually became the Institute Music Secretary and represented IIT Palakkad twice in Inter IIT Cultural Meet.







Academic Programs

IIT Palakkad offers undergraduate program in four major engineering streams:

- ♦ Civil Engineering
- ♦ Computer Science and Engineering
- ♦ Electrical Engineering
- ♦ Mechanical Engineering

Each branch has a well-equipped curriculum and syllabus in accordance with the needs of the industry and the society at large. We encourage the students to develop innovative solutions to the real-world problems through engineering applications.

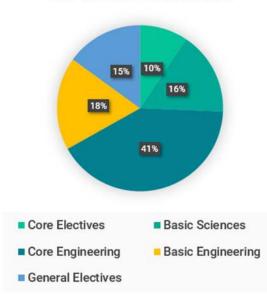
Computer Science and Engineering

Computer Science and Engineering (CSE) at IIT Palakkad aims to impart knowledge across the breadth and depth of computer science. We introduce students to the state-of-art technology through well designed courses like Machine Learning, Artificial Intelligence, Big Data, High Performance Computing etc., in early semesters and encourage innovation through projects using these technologies. Our programs build a strong foundation in students and prepare them for both industry jobs that involve cutting edge technology as well as higher education.

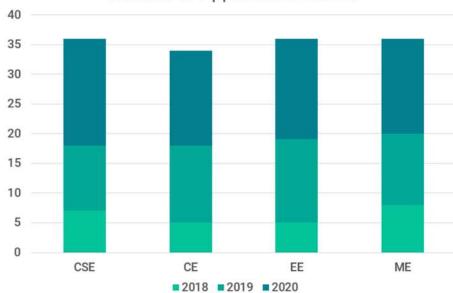
Civil Engineering

Civil Engineering (CE) at IIT Palakkad strives to produce well-trained engineers who use their knowledge and skills to address the concerns and demands of civil society. In addition to the conventional breadths of Civil Engineering, the UG curriculum lets students choose a bouquet of elective courses, based on their interests and career aspirations. They can either choose from a list of traditional subjects such as concrete technology, ground improvement, irrigation engineering, soil dynamics, etc. or from a list of modern subjects, such as earthquake engineering, transport and traffic systems, hazardous waste management, Geographical Information System (GIS) etc.

UG Credit Distribution



Number of Approved Electives



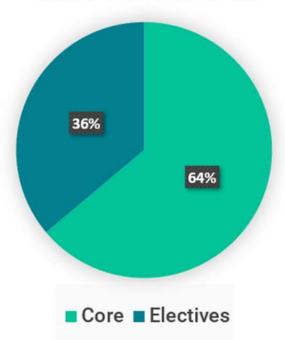
Electrical Engineering

Electrical Engineering (EE) offers an intellectually stimulating environment for undergraduate students to explore diverse areas within electrical engineering such as Communications and Signal Processing, Control and Robotics, Power Electronics and Power Systems. Microelectronics and VLSI design, Biomedical Signal Processing and Imaging and Microwave Engineering and Radar System. Apart from the rigorous classroom teaching, well-equipped laboratories provide students with hands-on experience. The courses offered incorporate the latest advances in the field and encourage students to appreciate the benefits of a multi-disciplinary approach. The academic and industry experience of our faculty members also add great value to creating a conducive learning environment.

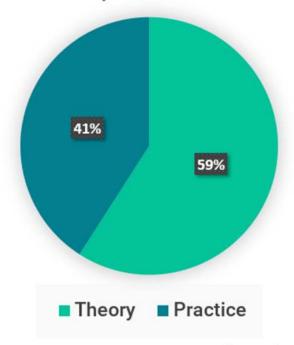
Mechanical Engineering

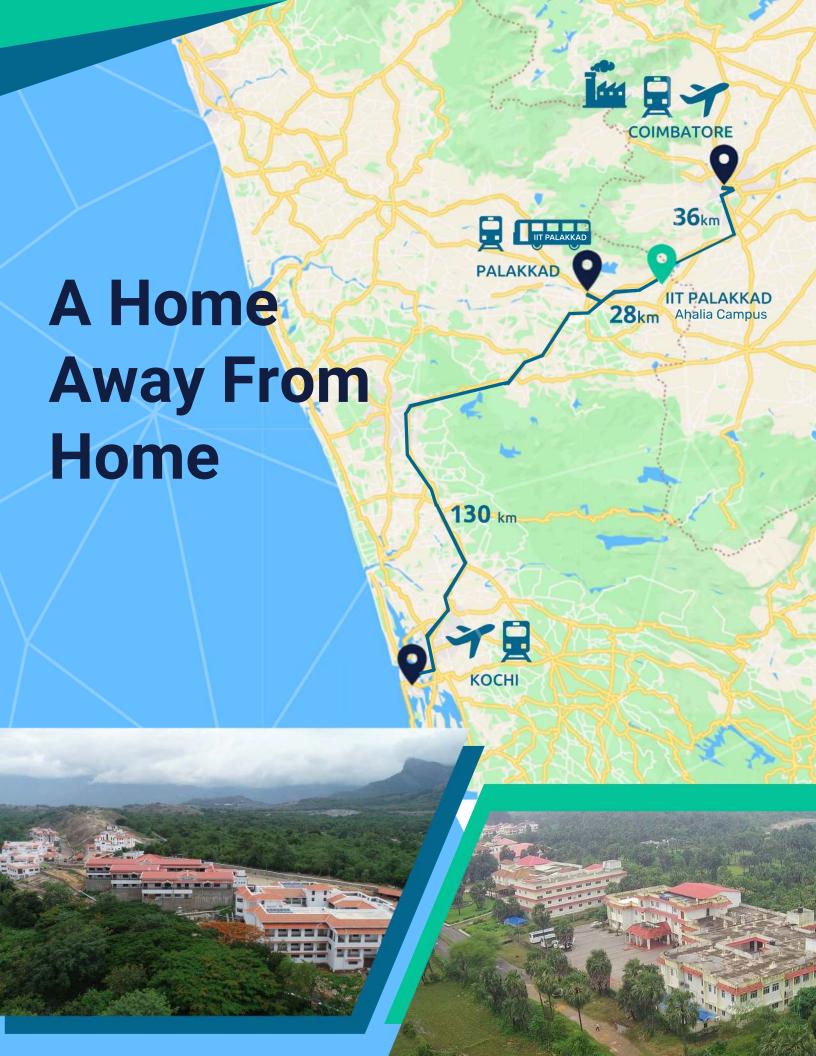
Mechanical Engineering (ME) focuses on teaching and research on Mechanical Design, Thermal and Fluids, and Materials and Manufacturing. Our engineering curriculum thrusts on three key aspects: acquiring technical know-how, developing problem solving skills and innovating new technologies. The courses are designed and revised regularly keeping in mind the demands of ever-changing scientific and industrial worlds. We offer a large number of courses to enable students to pursue their interests in areas such as Robotics, Fracture Mechanics, Computational Fluid Dynamics, Sustainable Energy Technology, Applied Thermofluids Engineering, Industrial Engineering, Additive Manufacturing, and Automation in Manufacturing. Our department encourages students to carry out internships and interdisciplinary projects for a holistic and fruitful learning experience.

Core vs Electives



Theory vs Practice





Learn and Grow



Library

A peaceful environment offering a plethora of resources including Books (fiction and nonfiction), Scientific Journals, Magazines, Newspapers. The Library also offers high speed internet access for accessing licensed online resources.



Courses information, resources, content and assignments are given via the Moodle Learning Management System.



Labs

Our institute provides all students access to fully furnished labs with experienced staff These include:

- Computer labs, with both Linux and Windows desktops, accessible 24x7
- Physics, and Chemistry labs for conducting research and experiments
- Electronics lab, Applied Mechanics lab Surveying lab housing state of the art equipment for practical hands-on learning
- An Innovation Lab for the students to make use of for all their personal project needs

Glimpses from the campus: Top: Library, Ahalia Campus

Bottom: Electrical Lab, Nila Campus, IIT Palakkad

The exposure I got by joining IIT Palakkad is great. I stay in hostel 3 in the Ahalia Campus and there is a gym facility and a common room with table tennis table and carrom board for recreation. The mess and the academic building are accessible by foot.

There is also a basketball court near the academic building and a friendly environment is set up to pursue your dream

Sukrutha Jayan, EE Undergraduate, Class of 2022.

Security

The campus is guarded round the clock by security personnel. Students are not allowed to leave the campus unless permission is obtained from the hostel wardens. Security cameras with adequate backup facilities are installed in the campus.

Healthcare and insurance

All the students of IIT Palakkad are covered under a medical insurance scheme for a yearly subscription. The institute has signed MOUs with nearby hospitals for cashless medical attention. The hospitals near the temporary campus are the Ahalia diabetes hospital and the Ahalia eye hospital (both are less than 3 Km away from the hostels).

Hostels

IIT Palakkad currently functions in 2 campuses: the Ahalia Integrated campus (Temporary Campus) at Kozhippara and the Nila Campus (Transit Campus) at Kanjikode. The first year students have their classes and accommodations in the Ahalia campus.

At the Ahalia campus, the hostels and the academic block are close by and connected through well-lit roads. The boys and girls have separate hostels with 24/7 Wi-Fi connectivity. Accommodations are on a double occupancy basis with attached bath. Basic facilities and areas for recreation and fitness are available in the hostels. A department store is available near the hostels.

The mess serves nutritious meals. Vegetarian and Nonvegetarian food are served. The campus also has facilities for athletics and other sports.

Student Wellness & Counselling Cell

Mental health and overall wellness of its students are a priority for the Institute. As part of IIT Palakkad's commitment to providing students with the best support systems during their time at the institute, the Student Wellness & Counselling Cell (SWCC) conducts regular activities and events. Our two in-house counsellors are an integral part of the SWCC and are available for our students to consult.

IIT Palakkad is strongly committed to creating an environment of equality, diversity and inclusion. To ensure the safety of all the students, mechanisms are in place to prevent any incidence of ragging or harassment and provide a stress-free, productive campus life.





Industry	Academia
Needs high Caliber Man Power	Excellent Source of New Ideas
Supports Futuristic Research	Curricula that meets Industry need
Management experience and marketing sense	Missing Leadership skills in academic scientists
Scalable innovations	Challenges in influencing to pursue new idea
Ideally should be CEO	Ideally should be CTO

Academic and Industrial behaviors and motives are different



Career Opportunities

Will be working for a company that I could only dream of when I joined this institute. A tremendous thank you to the Career Development Cell of IIT Palakkad and their efforts in making my dream turn into reality.

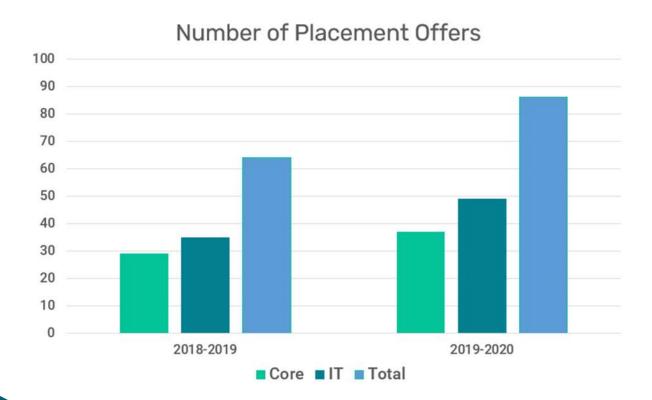


Placements @ IIT Palakkad

Through internships which are an integral part of our curriculum, we prepare our students for the fast-changing technological world.

Every year, IIT Palakkad hosts a variety of recruiters ranging from MNCs, IT and consulting firms to PSUs from the field of core engineering for placements and internships.

The continuous growth in our placement statistics every year in terms of number of offers and recruiters, increasing mean and median CTC and pre-placement offers received show the mettle of our students.



Nanyang Technological University

Indian Institute of Science

Auckland
University of Technology

Georgia Institute of Technology

Yodlee
Cloudera
Optum UHG
L&T Group
FordvConstructPaytm
KantarZS Associates
MaybankArista NetworksTrimble
CargillTexas Instruments Daimler
Amazon McKinsey Digital Daikin
SoroccoTCS ResearchTimken
AdobeUST GlobalTitan
HSBCFourkitesOYO
Mathworks
Panasonic
VMware

Here are some of the diverse companies that visit IIT Palakkad.

A considerable number of our graduates are opting for higher studies in reputed academic institutions such as Columbia University, Northwestern University, Pennsylvania State University, Arizona State University, UC San Diego, ESSEC Business School, Georgia Institute of Technology, and the IIMs & IITs.

Public Sector Recruiters:

Ordnance Factory Medak Fluid Control Research Institute Kochi Metro Rail Limited Bharat Earth Movers Limited

University of California, San Diego

University of Texas, Austin

Research Opportunities at IIT Palakkad

Research Scholar's Day (RSD) brings together all the research scholars in the Institute showcasing the exciting research projects they have undertaken through either poster or oral presentations.





At least one faculty member from the Engineering, Sciences and Humanities & Social Sciences streams also present their work at RSD. The day provides an opportunity for an up-close view of the life of a researcher and for you to decide if it's a future career path for you.

Semester Abroad Programs

The institute has signed an MoU with the Auckland University of Technology (AUT), New Zealand, which enables selected students of IIT Palakkad to spend a semester at AUT. In the past, students have also had the opportunity to take up projects at universities like NTU, Singapore

IIT Palakkad has been instrumental in shaping my career growth and aspirations. Like most of my peers, I joined IIT Palakkad with the primary aim of getting a high-paying job, but during the course of my study, I developed an interest in research. IIT Palakkad also gave me the opportunity of doing a research project in NTU Singapore in the area of Machine Learning and Signal Processing.



Anjali Agarwal, EE Undergraduate, Class of 2020, Researcher in TCS Research and Innovation Lab. To facilitate and encourage the entrepreneurship spirit, a collaborative centre is being set up at IIT Palakkad. Such a center will make IIT Palakkad a fertile ground for innovators and entrepreneurs.



IIT Palakkad is in the process of building a framework to support the budding entrepreneurs in our student community. The goal is to provide an integrated platform which will enable them to start with an idea even in their first year, explore its scope and possibilities through the **CSquare Innovation Lab and** the Innovation and Incubation Centre during their second and third years and turn the idea(s) into a successful venture by the time they are ready to graduate. The following infrastructure is available /being set up to enable the transition from prototype to product.

The Innovation and Incubation centre is a collaborative entity that IIT Palakkad is in the process of setting up to instill the innovative and entrepreneurial spirit in not just the students and faculty of IIT Palakkad but also the students. faculty of the region and the MSME community. In order to fulfill this mission, training programs, technical and business mentoring and access to facilities will be facilitated. The incubatees that are successful will be motivated to set up startups that will benefit the region and contribute to the Make in India endeavor

The Technology Innovation Hub which is funded by DST for "Intelligent Collaborative Systems" in the domain of "Cyber Physical Systems" will facilitate research and innovation in areas which will fall under Intelligent collaborative systems. These can vary from machine learning in agricultural applications, IOT enabled bio medical devices, to data science and AI enabled applications. Along with research projects, various MTech programs are also being offered in Data Science, Chip design, power electronics, etc. These research innovations are proposed to spawn incubation and startups.











Institute Website iitpkd.ac.in







Student Affairs Council sac.iitpkd.ac.in:8090



