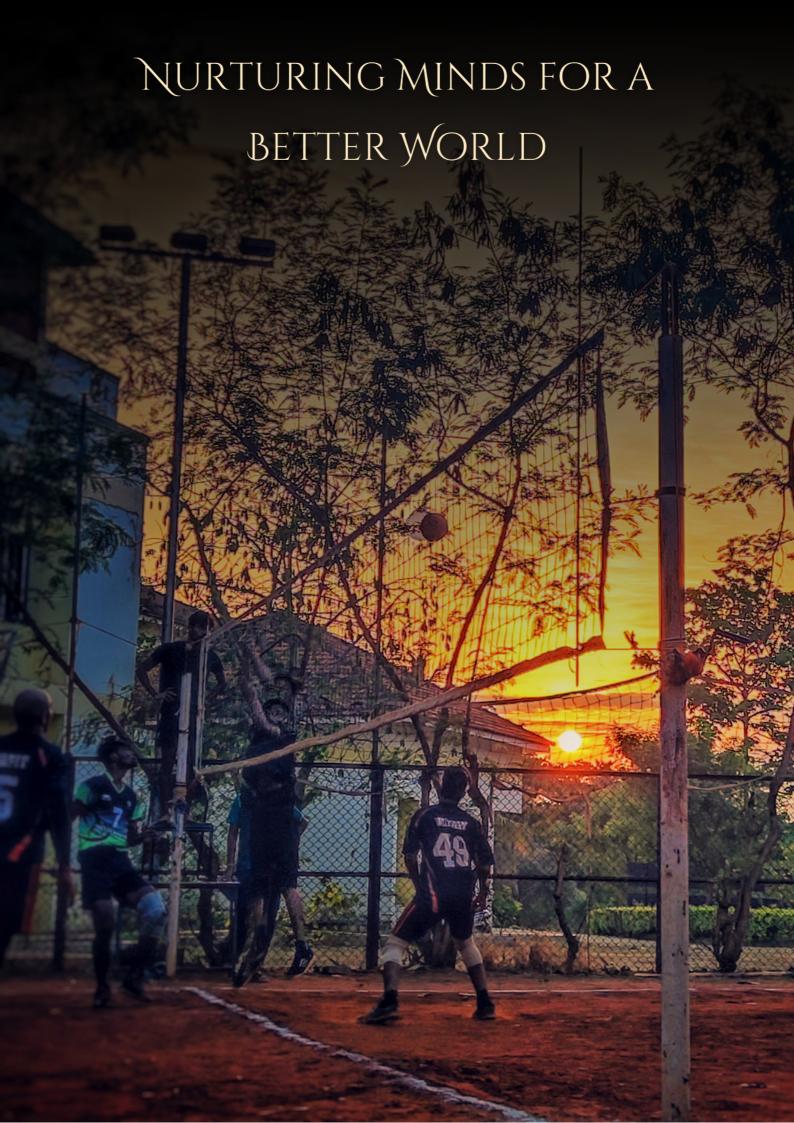


## IIT PALAKKAD

**UNDERGRADUATE ADMISSIONS BROCHURE 2023** 





## DIRECTOR'S MESSAGE

My heartfelt wishes and warm regards to all the new joinees. As you embark on a new phase of your academic journey, we are thrilled to be by your side, offering our support and guidance. On behalf of our esteemed institution, I extend a sincere and enthusiastic welcome to the incoming BTech batch of 2023-24 to IIT Palakkad!

We are truly delighted to have you join our Institute. Welcoming new students is always an invigorating experience for us. Last year, we introduced the Choice Based Credit System (CBCs), which allows B.Tech students to explore areas of interest beyond their chosen major. This means you have the opportunity to pursue a minor, dual-major, or dual degree, irrespective of your primary field of study. In addition to traditional classroom learning, you can earn academic credits and enhance your research skills by engaging in research projects.

At IIT Palakkad, we take our motto "Nurturing Minds for a Better World" to heart. Our programs and courses are thoughtfully designed to integrate theoretical knowledge with hands-on learning and industry connections. We have invested in state-of-the-art facilities and a well-equipped innovation lab, providing an ideal environment for multidisciplinary exploration and innovation. Our commitment is to provide you with the best possible resources and facilities.

Here, we strive to help you evolve into the best version of yourself. To unlock your true potential, we offer activities and learning experiences that extend beyond the boundaries of the classroom and even the campus. Engaging with various clubs and participating in diverse activities can help you discover your talents and capabilities. To foster an entrepreneurial mindset and nurture the spirit of innovation among our students, we have established a dedicated innovation lab, IPTIF (Technology IHub Foundation). Additionally, we have a dedicated incubation space, TECHIN (Technology Innovation Foundation of IIT Palakkad), which supports budding entrepreneurs and catalyzes technological innovation.

As members of the 9<sup>th</sup> B.Tech batch, you will have the unique opportunity to be a part of the momentous transition to the splendid permanent campus, spanning an impressive 504 acres nestled at the base of the Western Ghats. While the construction phase is anticipated to conclude by mid-2024, we are elated to embark on this remarkable journey in tandem with your arrival. As we kick off this exciting adventure of expanding our minds and growing personally, I can't contain my excitement to see how we'll all come together and contribute to each other's success and make a positive impact on society. So, welcome aboard this awesome journey, and may your time at the Institute be filled with loads of happiness, fulfillment, and epic wins!

## **HELLO EVERYONE!**

If you're reading this brochure and are weighing the great option of joining IIT Palakkad, then first-off, I would like to congratulate you for your results. I'll try to explain about the Institution, its people, and its functioning as briefly as possible in the few lines that follow.

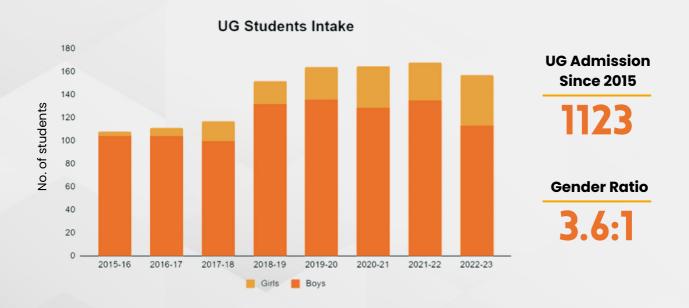
IIT Palakkad, in a nutshell, is a place of opportunities. All it takes for one person to grab an opportunity is to put their hands up and say "I will do it.". There's absolutely no shortage of opportunities here, for those who seek them. The Institute is equipped with state-of-the-art facilities which are easily accessible to the students and which also encourage students to bring out their creative selves using a well-planned and wellrounded curriculum. What makes this Institute an 'Institute' isn't just the buildings or the bricks and mortar it's made out of but rather the people, especially the students, who shape its future. This means that each and every one of you who joins us can potentially play a huge role in shaping the future of the Institute. Anything and everything that concerns student activities and welfare is the duty of the Student Affairs Council (SAC). There are 8 SAC secretaries in all, including the Students' General Secretary, who has been bestowed with the responsibility of ensuring that the SAC performs as a well-oiled machinery and that student life here moves ahead unhindered and carefree. Some of the opportunities I mentioned earlier can also be in the form of SAC roles which to me are highly valuable roles as they instill skills within you that just the confines of the classroom cannot. Finally, I would like to state that we are not just an Institution but also a family. We might be a small family right now but we are certainly a happy family. So, if you choose to join us, not only are you going to pursue academic excellence but also make friends and memories for a lifetime. Eagerly looking forward to welcoming you very soon!





## A WARM WELCOME

IIT Palakkad unlocked its doors to the outside world with **106 students** in **2015**. Since then, our Institute has grown in terms of the number of students, staff and faculty, the strength of our infrastructure and the breadth of our areas of expertise. In the last eight years, a total of **1123 UG students** have been admitted to the Institute. At present, there are **646 UG students** enrolled in the Institute: **506 boys** and **140 girls**, resulting in the **highest gender ratio** among the third generation IITs. Furthermore, **22.6%** of our faculty members are females. We are glad to welcome you all on board as the 9<sup>th</sup> batch of IIT Palakkad which is diverse and inclusive across all ethnicities and gender groups.



## HOLISTIC EDUCATIVE CULTURE

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. Students are academically empowered, scientifically aware and socially responsible. In this academic year, the new curriculum which came into effect in the academic year 2022-23, will continue to provide increased autonomy in the learning process and flexibility to carve the career path of your choice. There are also many avenues available for students to actively engage in and benefit from co-curricular and extra-curricular activities.

## **A Few Highlights**

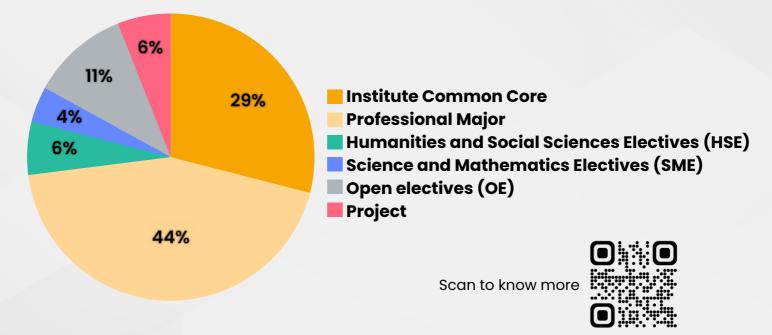
- Extra Mural Lectures (EML) aim to expose students to a variety of topics beyond their curriculum and also provide a platform for students to interact/exchange ideas with accomplished speakers from various walks of life.
- **Periodical Public Lectures and Institute Colloquium** on different topics of contemporary interest by internationally acclaimed scientists and intellectuals. Regular talks on topics across all domains of knowledge.
- Conducting activities via bodies like **NSS** to impart and hone life skills.
- Helping students cultivate management, organizational and leadership skills via active participation in many of the **Institute's committees and student-run clubs.**
- Gender sensitization programs, outreach activities and talks on relevant topics organized by **Kadambini**, the women's forum of IIT Palakkad



## CREDIT-BASED CURRICULUM

IIT Palakkad aims to provide students with a well balanced education by integrating the courses in engineering, sciences, mathematics, humanities and social sciences. The new curriculum permits students to explore entrepreneurship activities. Students get exposure to courses that are directly relevant to industry.

- Multiple degree options for students under the new system: Minor, Major, Honours, Double Major, BTech-MTech Dual Degree
- Select courses in dual degree programs are run in collaboration with industry partners
- Breaks available for students to undertake internships
- Emphasis on project oriented learning



IIT Palakkad moved to a credit-based UG curriculum from 2022. This gives students the freedom to design their own course path or follow a conventional structure, if they wish to. The curriculum aims to provide students with the opportunity for taking several electives in areas of their choice, while ensuring a well-rounded education with required courses in basic sciences, mathematics, engineering, and humanities and social sciences. Students are also encouraged to do more hands-on courses with several avenues for doing projects, readying them for roles in startups, and industry. The curriculum also enables students to graduate with honours, which might be attractive to students who want to pursue higher studies. Similarly, for students who wish to pursue a career in research, options to take up research-oriented projects and an honours programme by research are available. The curriculum also acknowledges that roles in the real world are more, and more multi-disciplinary, and hence, has provisions for students to major in two streams, or graduate with a minor in an area. Thus, students would also have the possibility of formally show-casing their expertise in an additional area, different from the one they were admitted to, based on their interest. All-in-all, the curriculum aims to give the best educational experience to our students, with options based on their preferences.



Prof. Anand T N C
Dean (Academics)

## WORLD OF LEARNING

## Academic Programs at IIT Palakkad

- Strong investment in the notion of synergy and in a dynamic interrelationship between research, theory and practice in academics
- Impressive student-faculty ratio of 10:1
- Various modes of education and evaluation to ensure effective learning
- Continuous evaluation that constantly assesses student performance

## IIT Palakkad offers undergraduate programs in five engineering streams

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



## **CIVIL ENGINEERING**

The Civil Engineering program aims to provide students with comprehensive knowledge in Civil Engineering and empower them as technically adept socially responsible, ethical and critical system thinkers.

The CE curriculum includes electives such as

- Advanced Structural Analysis
- GIS and Remote Sensing
- Advanced Concrete Technology
- Airport and Railway Engineering
- BIM for Construction Management.



## COMPUTER SCIENCE AND ENGINEERING

The curriculum is developed with a special emphasis on fundamentals and practical learning. The core courses are intended to prepare and motivate the students for a large pool of electives which covers several deep and state-of-the-art topics.

The CSE curriculum covers

- Graph Theory and Combinatorics
- Foundations of Data Science and Machine Learning
- Game Theory
- Natural Language Processing.



## DATA SCIENCE AND ENGINEERING

The core courses in the curriculum build a strong foundation in mathematics, probability and statistics, computational thinking, data management, modeling and assessment, and ethics.

The DSE curriculum covers:

- Introduction to Artificial Intelligence
- Data Analytics
- Machine Learning
- Deep Learning
- Al Ethics



## **ELECTRICAL ENGINEERING**

Majority of the core courses are integrated with lab/practice components to emphasize practical learning.

The EE curriculum includes electives such as

- Digital Signal Processing
- Analog Circuits Theory
- Electrical Machines
- Power Systems



## MECHANICAL ENGINEERING

The ME curriculum covers

- Wheeled Mobile Robots
- Aerospace Propulsion
- Computational Fluid Dynamics
- Measurements in Thermo Fluids
- Additive Manufacturing
- Lean Manufacturing
- Fundamentals of Acoustics



## **SEAT MATRIX**

Discipline	Sanctioned Intake
CE	40
CSE	40
DSE	40
EE	40
ME	40

## **BEING HANDS-ON**

## Open Ended Lab/Projects

Open Ended Lab/Projects encourage students to carry out research in their fields of interest and to create or study something that has real world implications. More than 100 students took up OELP projects offered by various engineering and science departments.

## Explore some fascinating projects from the areas like:

- Biomedical signal analytics
- Drone based imaging platform
- Path planning-UGVS
- · Deep learning
- Sustainability analysis
- · Food security under changing climate
- Hydroclimatic data analysis

## State-of-the-art Research Facilities

- Central Instrumentation Facility
- Central Micro-Nano Fabrication Facility
- Central Facility for Materials and Manufacturing Engineering
- Chandra-High Performance Computing Cluster

"The Open-Ended Lab/Project (OELP) at IIT Palakkad has given me a whole new perspective on the practical applications of our coursework in the real world. Throughout the semester, I had the opportunity to collaborate closely with experienced professors, gaining valuable insights into research methodologies and related areas. This interdisciplinary platform not only allowed me to work on diverse projects but also provided exposure to other engineering domains. I highly recommend the OELP to those seeking a unique experience beyond regular coursework and a chance to explore the interdisciplinary aspects of engineering."

Nakul C

EE Undergraduate, Class of 2025





## **EXPERIENCE OUR VIBRANT CAMPUS LIFE**

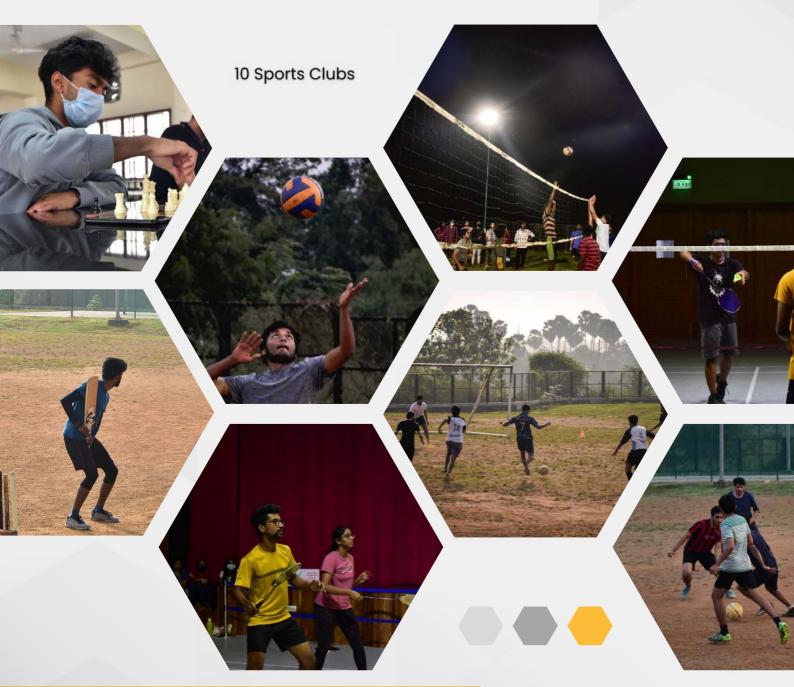
- Festivals including Diwali, Onam and Holi are celebrated enthusiastically by the Institute community.
- The annual student fest, Petrichor, is the biggest technocultural event in our student calendar.
- All academic activities will be operating at full capacity in the permanent campus starting from August 2023.
- Events of the Society for the Promotion of Indian Classical Music And Culture Amongst Youth (SPIC MACAY) and Ek Bharat Shreshtha Bharat (EBSB) events are regularly hosted on campus.
- As many as 27 student-run clubs, both cultural and technical, host regular events. These include Robotics club, Finance club, Fitness club, Coding club, several Cultural and Sports clubs, to name a few.



## FINDING YOURSELF

## **SPORTS**

IIT Palakkad boasts state-of-the-art in-house facilities for playing football, volleyball, basketball, badminton, table-tennis and cricket. Professional coaches for these games and athletics visit campus and offer their services.



## FLEXING YOUR CREATIVE MUSCLE

## **CULTURAL ACTIVITIES**



The Institute boasts a range of cultural clubs from music, dance, dramatics, photography, videography and yoga clubs. These diverse clubs provide ample opportunities to collaborate with those who share similar interests and to further hone your skills. We have a line-up of exciting events held on campus where you can showcase your talents, such as Litscape, Arsh, Battle of Bands, Naatya and many more.

9 Cultural Clubs











## OF THE STUDENTS, BY THE STUDENTS, FOR THE STUDENTS







Automobile Club

Data Analysis Club

































"In line with IIT Palakkad's motto 'Nurturing minds for a better world', we foster diverse co-curricular and extra-curricular activities for the holistic development of the students. In these last eight years of our beautiful journey, several milestones have been achieved and were made possible only because of a friendly and conducive atmosphere at the Institute and sincere efforts from our student community. The activities of the students are duly mentored by faculty members who help in developing a personality in the students, which is vital to choose the right path in life. At this juncture of moving to the main campus with new facilities, we are delighted to welcome the 2023 batch of young minds to grow, prosper and lead the Institute to new heights while enjoying campus life."

**Prof. Jagadeesh Bayry**Dean Student Affairs









## PETRICHOR

Every college's crown jewel is its fest, for it represents the students' collective ability to interact with the real world, and with industry and come out with flying colors. Petrichor, techno-cultural fest, is already garnering attention as the fastest-growing fest with impressive technical events and awe-inspiring cultural events. This is where you get to prove your mettle. Whether it is being quick with tech or being creative with cultural events or being smart with finances, Petrichor is the arena for you to channel your energies in your preferred direction and help bring the idea that is the fest, into reality. With many facets of the fest to be taken care of, including the Pro-show night and marketing team, we need a vibrant group of students with diverse skill sets to make it happen. All we can assure you is, in the end, Petrichor is guaranteed to give you an experience of a lifetime, whether you work for it or witness it.











"The sense of fulfillment and happiness that I experienced walking around the roads of Nila during Petrichor 2023 was beyond words. It was like witnessing all our efforts and dreams of the entire tenure coming true. Seeing crowds of thousands reaching our campus, participants hurrying up with their practice sessions and makeup, decorations, the spirited support to teams, and the loud cheering during prowshows will always remain one of my best memories. A time when the entire IIT Palakkad stuck together. Looking back at Petrichor'23, it began with the core team formation, followed by prefest workshops on topics such as IC engines, game development, signal processing and Al. It witnessed a participation of around 500 students from 44 colleges in and around Kerala, Karnataka and Tamil Nadu. The National Technology and Entrepreneurship summit 2.0 had the theme of "Tenets of Technology-Embracing New Perspectives". We had an online Halloween photo challenge, and our final fest with the theme "VIVIDH-Celebrating Differences". We had around 35 events with 1500 participants and a remarkable footfall of about 5000."

### Aleena Paul

Fest Coordinator, Petrichor' 23 EE Undergraduate, Class of 2024

"Obtaining sponsorships, keeping track of expenses, and interacting with a variety of departments makes up the business side of working on an Institute festival. Petrichor was a multifaceted effort that called for expertise in several fields, all of which were geared toward achieving a shared goal. As such, teamwork was crucial and it helped teach us how to adapt to unexpected situations while providing fresh solutions. Our contacts had high expectations, so professionalism was key, making it necessary to think fast and communicate effectively. Success, in other words, depended on working together and being creative under pressure. The event created great enthusiasm and a sense of community, and helped us socialize with the throng. It was a transformative experience, memorable because it combined the satisfaction of a successful event with essential skills like business management, decision-making, and people-handling."





## HOME AWAY FROM HOME

## **HOSTEL FACILITIES**

The Institute has a total of 5 hostels with all essential facilities. The student-run mess operates at two locations within the campus. In-addition, there is one amenity center which caters to day-to-day needs of the students, staff and faculty. Starting August 2023, our academic activities will operate from the main campus.

## All hostels are equipped with

- Solar heaters
- Spacious dining hall
- · An indoor games area
- A fitness center
- Multiple RO-based drinking water system
- A heavy-duty washing machine on each hostel floor
- WI-FI/LAN connected rooms Wi-Fi enabled common rooms with television, newspapers and selected magazines







"The hostels consist of almost everything required for a comfortable stay or to be called a 'home' away from home. The rooms are sufficiently large and consist of WLAN ports with high-speed internet connectivity and the fans and lights operate on smart tech. What's even more special is that each room contains a large balcony. The hostel consists of an in-house gym and common washrooms, which are sanitized on a daily basis. We also have a common room with TV and indoor sports facilities. In addition to the hostel facilities, the Institute also has a fairly large ground for cricket, football, and volleyball and an indoor badminton court. We also have an amenity center to provide us with considerably good food at fairly budget prices. Overall, I haven't faced any difficulties during my stay here so far, and consider it to be my second home."

## **Shivansh Chaudhary**

ME Undergraduate, Class of 2024



The main campus consists of an academic block featuring a classroom complex with a seating capacity approximately 2000 students, department buildings, central fabrication facility, a heavy machinery lab, research complex, and hostels equipped with top-notch amenities. Starting from August 2023, our academic activities will operate from the main (permanent) campus.





## **WELL-BEING**

At IIT Palakkad, we are committed to the well-being, both mental and physical, of all members of the Institute community. We have resident psychologists, a physical training instructor, a yoga teacher, an antiragging cell, a dedicated women's forum-Kadambini and also tie up with an online counseling and emotional wellness service.

## **MEDICAL FACILITIES**

The Institute has an in-house clinic with resident doctor and nurse. All students of IIT Palakkad are given a medical insurance scheme on a yearly subscription. In addition the Institute has signed MoUs with nearby hospitals for cashless medical care.

## SECURITY AND SAFETY

IIT Palakkad provides an extremely safe and secure campus life. Ragging is prohibited in our campuses and there is a strict antiragging policy in place. We also have round-the-clock CCTV monitoring and security personnel who patrol the campus regularly.



## FINANCE YOUR EDUCATION

Six different scholarship and fee remission schemes are available to UG students These include full fee remission, Merit-Cum-Means scholarship, two-third fee remission, SC/ST scholarship, SC/ST fee remission and PwD fee waiver.



## **CAREER OPPORTUNITIES**

For the Academic Year 2022 - 2023

Average CTC

₹ 15.70 lakhs

154 Companies Visited

140 Offers

130 Students placed

Percentage of students placed

94.9%

The Highest package ₹ 46.15 lakhs

Highest ever package obtained by a student at IIT Palakkad till now is Rs 1.2 Crore. Notable international offers - Accenture Japan, Webstaff.

**Higher Education**: Several students obtain admissions into prestigious national and international institutions and universities every year.

Accenture-Japan Texas Instruments Hitachi Bosch

AMD Media Tek Maruti Suzuki MathWorks Arista

Networks L&T Group GE Digital Arista Networks

Versa Networks Sprinklr Wabtec Corp Innoplexus

Webstaff BEL Ceremorphic Technologies Pvt Ltd Innoplexus

ICICI Bank HCL Intel Mercedes-Benz TCS TATA

Autocorp Mahindra & Mahindra William O'Neil Maybank

Havells Globallogic AirAsia Mathworks

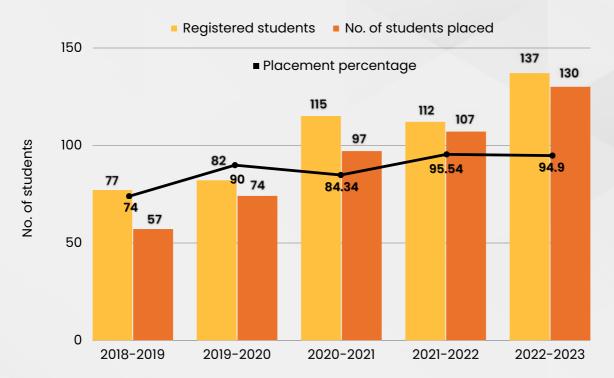


Having worked with the Career Development Centre(CDC), I was able to develop an astute understanding of the various career opportunities and significantly multiplied my connections with the industry. On the personal front, I was fortunate and thankful to CDC for providing me with decent opportunities to kickstart my career in the industry. More importantly, I'm excited to have dual offers including an international offer right at the beginning of my career and all this wouldn't have been possible without the efforts of the placement team.

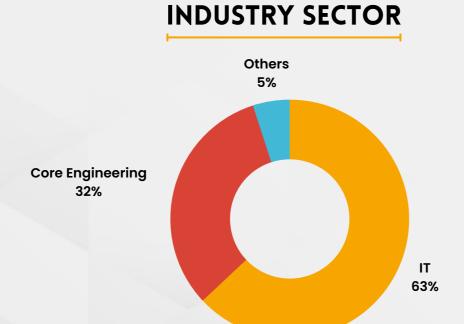
## Yagnesh Katragadda

CSE Undergraduate, Class of 2023 Placed at Accenture Japan

## **PLACEMENTS OVER YEARS**



\*Placement percentage is based on no. of students registered



Others (Research and Development, Consulting, analytics etc)

## IAC: INDUSTRY ACADEMIA CONCLAVE

IAC (Industry Academia Conclave) is a prestigious annual conclave hosted by IIT Palakkad for industry and academia delegates to interact with our institute community through a series of talks and other sessions. The event gives our students and faculty members opportunities to interact and experience the new industrial and academic trends, cutting edge technologies, comprehend technical aspects and to gain a better knowledge about the demands and opportunities in higher studies and research. The interaction of industrial, market and technological trends offer an exclusive opportunity, and industry and academia leads from various parts of the world benefit from the networking.







MIS AB V P
CSE Undergraduate, Class of 2024
General Secretary, Academic Affairs
Student Affairs Council

As students at IIT Palakkad, we are exposed to a very diverse curriculum with a large number of electives which enables us to focus on our interests and diverse tastes cutting across domains. This enables us to understand and experience a lot of technologies and techniques widely used in these domains, and makes us industry ready well in advance. IAC is our prestigious event hosting 50+ talks from across industry and academia. Delegates from various industries and sectors offer their insights in each of their areas of expertise. A huge number of delegates attend and visit the campus to learn more about us, our students and their talents and interests. This also helps our institute community broaden its network with academia and industry, enabling our students to gain insights and a lot of opportunities in higher studies and in industries. Collaborative projects and internships often originate from these interactions as well. Being part of this student-driven event and many others for the past years, I could gain and develop my management skills and experience, along with my communication skills. This year, as chief organizer of the event, together with my team, I am striving hard to bring more industries and experts from academia to the event. It is our collective endeavor to make IAC a grand success, with incremental improvements year after year.



## INTERNATIONAL & ALUMNI RELATIONS CELL

IIT Palakkad International and Alumni Relations Office (IAR) is the first point of contact for Institute and Universities from abroad to initiate partnership and collaboration. It aims to encourage and facilitate engagement of our alumni with each other, with our current students and with the Institute. We actively promote alumni achievements, help them build connections, and work to address any concerns.



"I'd like to take a moment to convey how grateful I am to my Institute, IIT Palakkad, for the wonderful chance that has been given to me to study abroad. My academic and personal development have been greatly influenced by my Institute's commitment to establish foreign exchange programs. On top of that, I would like to appreciate the relentless encouragement of faculty and staff. They gave great guidance and mentoring throughout the application process."

## M. Sai Ramya,

CE Undergraduate, Class of 2023 (NTU Singapore India Connect Research Internship Programme)







## INCUBATION AND

The Institute provides a vibrant ecosystem for innovation and entrepreneurship in line with the National Innovation and Startup Policy 2019. A duly constituted Institute Innovation Council comprising faculty, students and external experts oversee the same. Students are encouraged to develop solutions to the problems existing in industries or society using the prototype development facilities available in the Csquare Innovation centre. Further support is made available through the incubating companies TECHIN and IPTIF.













## **Csquare Innovation Centre**

The centre is a well-equipped facility for the fabrication of any prototype, proof-of-concept designs or project work in soft and hard materials. Prominent equipment include computer numerical controlled (CNC) plasma, router, hot wire and laser cutters for working with metal, thermocol, wood, and acrylic. These facilities are being used extensively by students and faculty for various courses, research projects, open ended lab/projects and student-run technical clubs.



## TECHIN- Technology Innovation Foundation of IIT Palakkad

TECHIN is a non-profit organization, founded by IIT Palakkad, that collaborates with central and state governments, various national and international industries and higher educational institutions to support innovation and incubation of ideas to address myriad problems of society. TECHIN has three centers of excellence: GSCOE – Global Sanitation Centre of Excellence which is partially funded by the Bill and Melinda Gates Foundation, Med Tech CoE – Medical research and Technology Centre of Excellence and TIC – Technology Innovation Centre.

## IPTIF - IIT Palakkad Technology iHub Foundation

IPTIF is one of the 25 Technology Innovation Hubs (TIH) set up by the Department of Science and Technology, Government of India, to enhance product development, human resource development, startup development and facilitate international collaborations. The foundation conducts several events throughout the country to accomplish the same and also extend the infrastructure for proof-of-concept design to the potential innovators and entrepreneurs.

IIT Palakkad also provides excellent infrastructure and ample opportunities to promote the ideas of students and help them develop prototypes/ proof-of-concept and finally establish business entities as well so that they become employment providers instead of employment seekers at the end of their program.



# REACH US



Coimbatore Airport: 60 km



Palakkad Junction: 14 km Railway Station

Coimbatore Junction: 50 km Railway Station

















## GET IN TOUCH



## **Admission Queries**

btech.iitpkd.ac.in (General) jeew.helpdesk.iitpkd.ac.in (Women Helpdesk)





Indian Institute of Technology Palakkad भारतीय प्रौद्योगिकी संस्थान पालक्काड

Nurturing Minds For a Better World