

About IIIT Kottayam

Indian Institute of Information Technology (IIIT) Kottayam was established in 2015 with the major objective of setting up an education model that can produce best-in-class human resources in IT and harness the multidimensional facets of IT in various domains. It is one of the IIITs that have been established as "Institution of National Importance" by the Ministry of Education, Govt. of India, under the IIIT (PPP) Act 2017. IIIT Kottayam is expected to contribute significantly to global competitiveness through the key sectors of the Indian economy and Industry, focusing on applied research and education in IT and allied areas. IIIT Kottayam conducts academic programmes of B.Tech. in CSE, CSE with specialization in Cyber Security, CSE with specialization in AI & Data Science, ECE, M.Tech. in AI and Data Science, Cyber Security, Big Data and ML, Integrated M.Tech. in AI & Data Science and Ph.D. in various disciplines such as CSE, ECE, Mathematics, and allied areas.

Infrastructure of IIIT Kottayam

The institute is connected to National Knowledge Network (NKN) with a bandwidth of 1Gbps and 5Gbps from BSNL. The laboratories are equipped with various hardware and software required to carry out the research. Researchers have 24x7 access to the high performance computing facilities along with the campus-wide licensed Matlab Software package. IIIT Kottayam has become a research-driven organization where ten research groups are outfitted with cutting-edge tools and technology. Besides this, IIIT Kottayam has signed a number of MoU with leading research organizations from India and abroad. In order to become one of the top academic institutions in the world, we plan to pursue research excellence, foster innovation, provide top-notch education to train the next generation of scientists and technologists, and use scientific and technological advancements for the development of India's economy and social welfare. Numerous organizations recognize many IIIT Kottayam students and researchers each year for their outstanding contributions to research. Institute is also subscribed to various E-resources including IEEE Xplore Digital Library along with IEEE IEL, to enhance research and learning experience.



Application Portal Opens **18** OCTOBER 2024

Application Deadline **30** NOVEMBER 2024

Written Test & Interview **11-18** DECEMBER 2024

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- www.iiitkottayam.ac.in

Eligibility Criteria [Click Here](#)



Ph.D. Admissions January 2025



IIIT KOTTAYAM



About the Programmes

IIT Kottayam launched its doctoral programme to impart the knowledge, skills, and attitude to do world-class research in the area of computer science and its allied fields. Most of the Ph.D. Scholars have been awarded scholarships under various schemes from different funding agencies, like DST, SERB, MeitY, CSIR. Institute may provide teaching assistantships to eligible students as per prevailing norms. Our scholars are now collaborating with international universities to enhance their research works. The faculties of the Engineering departments and Computational Science and Humanities department along with their research scholars, perform cutting-edge research in their respective domains and have resulted in highly acclaimed publications in reputed Journals and Conferences, as well as Patents in their respective domains. Our faculties also take industrial consultancy projects, apart from sponsored research projects and collaborative projects with Industry/Academia within India and abroad.

Admission Category

- SCHOLARSHIP HOLDERS
- SPONSORED
- SELF-FINANCING
- EXTERNAL REGISTRANTS

Research Areas

Computer Science and Engineering (CSE):

Artificial Intelligence (AI): Responsible AI, Explainable AI, Cyber Security, AI/ML in smart agriculture, health care, social good, Bioinformatics, NLP, Health Informatics, Computer Networks, Software Define Networking, Network/Cyber Security, Computer Vision, Deep Learning, Deep Learning on Image/Video Processing, Edge/Cloud/Distributed/Fog/Culture Computing, Offensive Security, Web Application Security, Cryptography, Multimedia Forensics, Applied Cryptography, Post Quantum Algebraic Cryptography, Data Science, Optimization, Lightweight Cryptography, IoT Security, Block chain and Security, Ethical hacking, Cyber Physical Systems, Bioinspired algorithms, Digital Forensics and Crime Investigation, IoT Forensics, Mobile Application Forensics and Security, Big Data Analytics, Distributed Database, Information security, Biometric Security, Block chain Technology, Graph Theoretic Algorithms, Data Analytics, Resource management and scheduling for future compute continuum, Machine Learning in Distributed computing systems, Bioinspired optimization for distributed computing systems, Cloud Data Security, Intrusion detection and Prevention, Optimization Problems, Algorithms and Graph Theory, Medical Image Processing, GIS applications, Video Analytics, Quantum Computing.

Electronics and Communication Engineering (ECE):

Wireless Communications, Reconfigurable Intelligent Surfaces, 5G and 6G Wireless Systems(Physical Layer), Physical layer challenges in Wireless communication, Anomaly detection in computer networks traffic, Optimizations in the L3/L4 of Wireless sensor networks, MIMO, Antenna Design, RF and Microwave, Machine Learning, Deep Learning, Image Processing, Signal Processing, VLSI DESIGN, FPGA, Embedded Systems, Electronics, Circuit Design; Free Space Optics, Visible Light Communication, Photonics, Broad area of materials science and smart materials, VLSI and Embedded Systems, Signal Processing, Instrumentation, Computer Vision, ML, Image Processing, Optoelectronics, Quantum Sensing & Metrology, Quantum Materials & Devices, Ocean Optics, Lasers, Spectroscopy, Material-Device-Circuit Co-design for Robust SRAM Cell, Advanced MOS Devices modelling and simulation, Steep Switching Devices, Digital Integrated Circuit Design, Reliable and Secure Circuits, SRAM Based In Memory Computing.

Computational Mathematics

Scientific Machine Learning, Physics Driven Deep Learning Technique for Differential Equations, Evolutionary algorithms, Surrogate optimization, Advanced Optimization Algorithms for ML/DL/DS, Fuzzy Mathematics, Mathematical and Computational Finance, Fluid Mechanics, Bio Fluid Mechanics, Operation Research, PDE, Graph Theory.

How to Apply

- Candidates can apply only through the online application portal, <https://phd.iitkottayam.ac.in/>
- There is no provision for offline submission of application forms.
- If you are applying for more than one discipline, please submit a separate application for each discipline.
- Incomplete applications will be rejected.

Application Fee

- General/OBC candidates: **Rs.1000/-**
 - SC/ST/PWD/Female candidates: **Rs.500/-**
- To be paid through *State Bank Collect*.

Collaborations

- University of North Decotah, USA
- Offenberg University of Applied Sciences, Germany
- University of Glasgow, United Kingdom.
- University of Klagenfurt, Austria
- Technical University of Munich, Germany
- National Chung Cheng University, Taiwan, etc

