



भारतीय सूचना प्रौद्योगिकी संस्थान ऊना
हिमाचल प्रदेश
भारत

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY UNA
HIMACHAL PRADESH
INDIA

ANNUAL PROGRESS REPORT
2023-24

IIIT Una

Annual Progress Report 2023-24



www.iiit.ac.in

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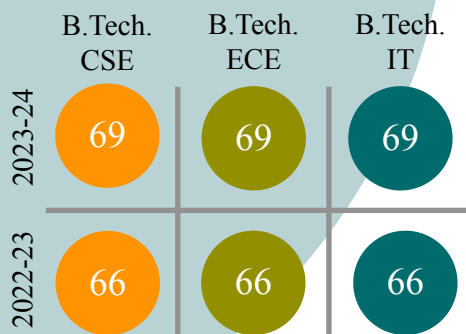
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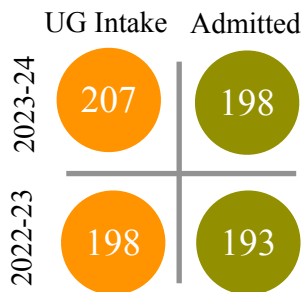
1. INTRODUCTION

1.1 YEAR AT A GLANCE

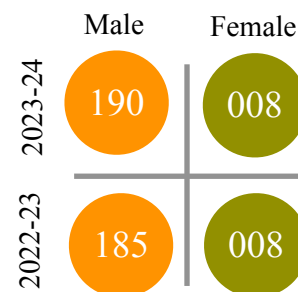
Academics



UG Programs offered and Intake

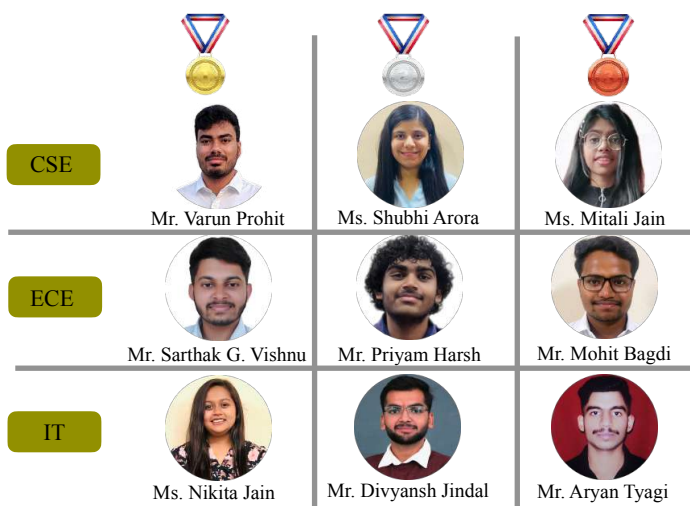


Total UG intake and admitted students

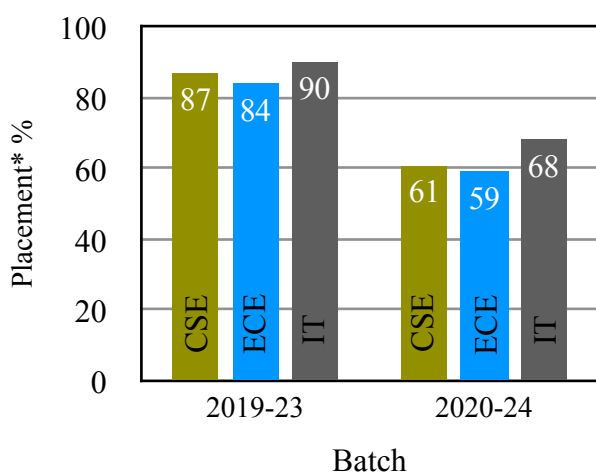


UG male and female strength

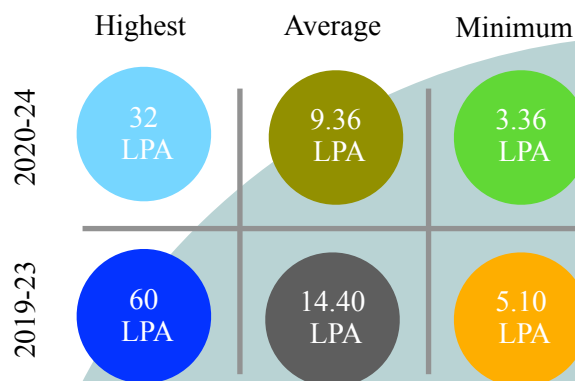
Medal Winners 2020-24



Placement Statistics



Branch wise placement statistics



Packages highlights

* This does not include who have opted for higher education.

Sustainable Campus (~63 Acres)

- State-of-the-art academic & research facilities
- Green cover (~60%)
- Zero waste campus
- Disable friendly campus
- Full CCTV coverage
- Fully functional Water Treatment Plant (WTP)
- Fully functional Sewerage Treatment Plant (STP)
- 24x7 uninterrupted power supply
- Sports facilities
- Solar Power Plant (work in progress)

Infrastructure Raised in FY 2022-23

- Cycle stand
- Canteen
- Pond restoration
- Stationary shop
- Open air auditorium
- Pathway to hostel-III

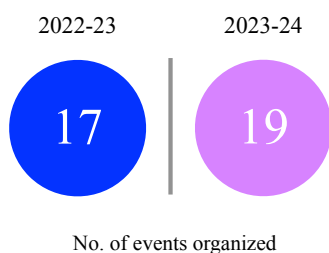
Research



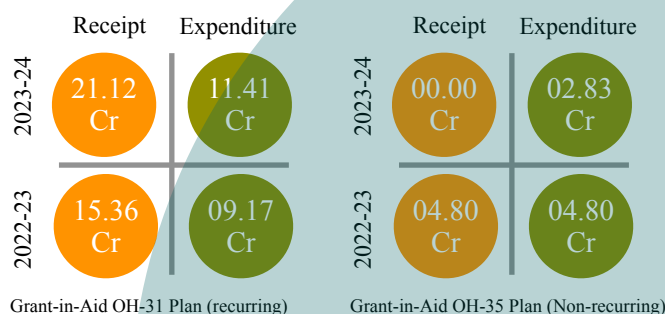
Workshops/Conference Organized

1. Short Training Course: Road to Research Publication: New Perspectives for Success held from 25-29 September 2023, at the School of Basic Sciences.
2. Workshop: Recent Advancements in VLSI Design and its Applications, 04-08 July 2023.
3. Workshop: Recent Developments in Machine Learning and its Applications, held on 05-09 June 2023.
4. IT Workshop for Police Officials, from 25-29 July 2023.
5. International Conference: Soft Computing Theories and Applications (SoCTA), 24-26 December 2023.

Events Organized



Financial



1.2 MESSAGE FROM THE CHAIRPERSON

It is with immense pride and honour that I present the annual report (FY 2023-2024) of the Indian Institute of Information Technology Una (IIITU) Himachal Pradesh.

Since its inception in year 2014, the Institute has swiftly emerged as one of the youngest yet fastest-growing institutes in the country among INIs, playing a critical role in shaping the future of higher education and technological advancement.

At IIIT Una, we uphold the highest academic standards, as evidenced by our rigorous admission process through the Joint Entrance Examination (JEE) and impressive placement record so far. Our goal extends beyond merely establishing a robust academic foundation for our students. We are committed to fostering their holistic development and inculcate a strong human value and a deep sense of personal social responsibility, empowering them to contribute meaningfully to a better world.

We equip our students with the skills and mindset to develop sustainable solutions hand in hand with industry for challenges that are both locally and globally significant and follow the path of imagination, research, innovation, and entrepreneurship. Our special academia-industry connect prepares them to solve real world challenges as well as opportunity to learn from the experience of eminent industry veterans.



This report highlights the institute's significant contributions and the critical role we play in advancing higher education and technological innovation. As we continue to grow and evolve, IIITU remains committed towards fostering an environment of continuous learning, research, industry collaboration, and entrepreneurship. We are not just an educational institution but a dynamic ecosystem where education, research, and industry converge to create a brighter future for all.

Lastly, I extend my heartfelt gratitude to all our partners viz.; Ministry of Education (GoI), Government of Himachal Pradesh, HP Power Corporation Limited, and HP Transmission Corporation Limited, faculty, non-faculty, students, and alumni who have contributed to our journey. Together, we are poised to make significant contributions to the national and global technological landscapes.

Ravi Sharma

1.3 MESSAGE FROM THE DIRECTOR

I am extremely glad to share that Indian Institute of Information Technology (IIIT) Una is organizing its sixth convocation for the graduating students of academic years 2023 and 2024 on 7th September 2024. It's a moment of great pride and achievement for the entire fraternity of IIIT Una.

On this occasion, I am happy to share that during the past few months institute has taken a number of steps towards beginning new academic programs, capacity enhancement in the existing academic programs to name a few. The institute has recently adopted the model curriculum framework of National Education Policy (NEP)-2020; minor degree programs and NPTEL credit transfer are few recent initiatives towards implementation of NEP.

It is our constant endeavour that we focus on providing a complete eco system which can nurture the students to not only gain the knowledge and skills of their field of choice but also inculcate values and holistic development to their overall persona. We are committed to provide a fertile ground which can nurture the entrepreneurial ambitions of students through a robust startup eco system.

On this auspicious occasion, I congratulate all the graduands and their parents for this remarkable achievement gained through hard work, dedication, passion and perseverance.



Last but not the least, my special compliments to all the medal winners in their respective categories. This is truly outstanding.

I once again congratulate all the graduands and wish a very bright future ahead in their future endeavours.

Prof Manish Gaur

1.4 ABOUT THE INSTITUTE

Indian Institute of Information Technology, Una (IIITU) is an Institution of National Importance. The institute was established in 2014 under the parliamentary act IIIT (PPP) no. 23 of 2017. The Institute is operating on a Public-Private Partnership (PPP) model under Ministry of Education, Government of India. The various PPP partners of the Institute are the Ministry of Education, Government of India, the Government of Himachal Pradesh, HP Power Corporation Limited, and HP Transmission Corporation Limited. These partnerships symbolize a significant collaborative effort aimed at fostering technical education and research in the region. The pathway to securing admission into IIIT Una's undergraduate programs is through the rigorous and competitive Joint Entrance Examination (JEE), a testament to the high academic standards upheld by the institution.

IIIT Una has swiftly emerged as one of the youngest yet fastest-growing Institutes of National Importance. This highlights the institute's contribution and critical role in advancing higher education to meet the growing demands of various industries. The institute prides itself on a robust academic community, comprising over 35 distinguished faculty members, 800 dedicated students, and a thriving alumni network of 500 graduates. IIIT Una offers an array of academic programs tailored to the contemporary needs of the technological world. These include five Bachelor of Technology (B.Tech) programs in Computer Science and Engineering (CSE), CSE with a focus on Data Science, CSE specializing in Cyber Security, Electronics and Communication Engineering (ECE), and Information Technology (IT).

Furthermore, the institute provides a Master of Technology (M.Tech.) program in CSE with specializations in Cyber Security and Data Science, alongside comprehensive Ph.D. programs within the School of Computing, School of Electronics, and School of Basic Sciences. Recently, the Institute has also started offering certificate programs in continuing education as well.

Beyond its educational offerings, IIITU is a beacon of research and innovation, continually striving to bridge the gap between academic research and industry application. The institute is deeply engaged in collaborative research initiatives with various industry partners, aiming to leverage technological advancements for the greater good of society. This collaboration is evident in the institute's extensive portfolio of industrially relevant activities, which include rigorous training programs designed to equip both graduate and undergraduate students with the skills necessary for industry success. Additionally, IIITU conducts cutting-edge research in areas of significant importance, provides consultancy and advisory services to industry players, and takes part in various socially relevant projects that aim to uplift and benefit the community at large.

The institute's commitment to fostering an environment of continuous learning and innovation is reflected in its strategic approach to industry engagement. The Institute has recently signed a MoU with Zscaler Inc., world leader in Zero trust-based cybersecurity, and European giant Sopra Steria.

By aligning its research objectives with industrial needs, IIITU ensures that its academic pursuits are not only theoretically robust but also practically applicable. This synergy between academia and industry is crucial in driving technological advancements that have a tangible impact on society.

In summary, IIIT Una is not just an educational institution but a dynamic ecosystem where education, research, and industry converge. It stands as a testament to what can be achieved through strategic partnerships and a shared vision of advancing technological education and innovation. Through its comprehensive academic programs, cutting-edge research, and active industry collaboration, IIIT Una is poised to make significant contributions to both the national and global technological landscapes.



1.5 VISION AND MISSION

Institute Vision

To build a vibrant multicultural learning environment with value based academic principles and to achieve excellence in teaching and research and to contribute effectively and responsibly to the national and global community.

Institute Mission

M1: To provide quality education to the students with practical orientation.

M2: To collaborate with industries and research institutions to solve socially relevant problems.

M3: To inspire students to become responsible citizens and competent professionals with ethical values.

School of Computing

Vision

To become a center of excellence in emerging areas and train students to become professionals solving challenging societal problems.

Mission

M1: To impart state-of-the-art knowledge in computer science and information technology with emphasis on practical knowledge and to promote specialization in emerging streams.

M2: To participate in research and development in industries and research organizations.

M3: To make the students aware of ethics and apply them in solving social problems.

School of Electronics

Vision

To impart up-to-date technical knowledge of electronics and communication engineering and equip the students to solve socially relevant global problems.

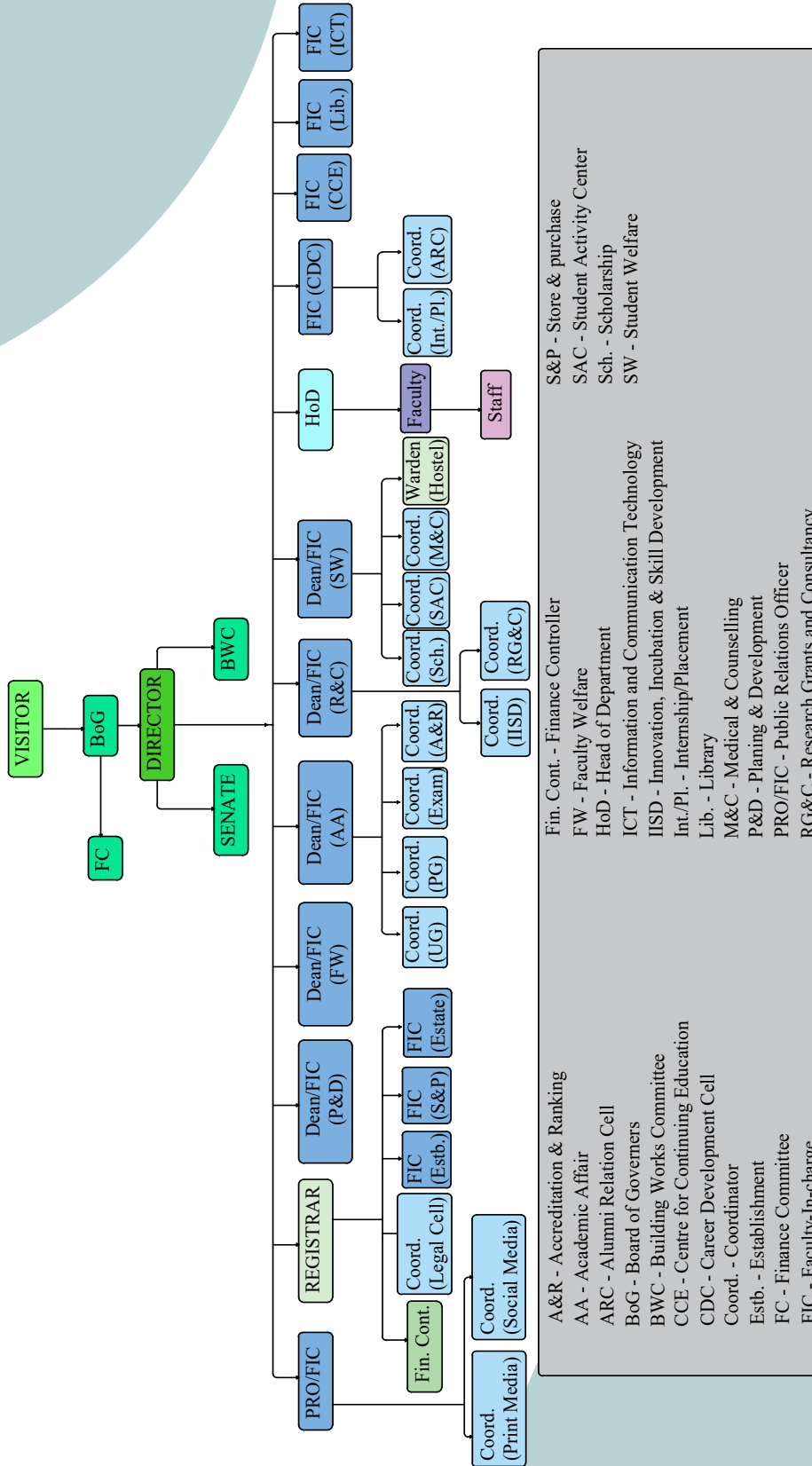
Mission

M1: To educate the students with theoretical and practical knowledge by imparting quality education.

M2: To increase research activities in emerging areas through continuous interaction with research organizations and industries.

M3: To encourage students to entrepreneurship, teamwork, and professional ethics in solving real world problems.

1.6 ORGANIZATIONAL STRUCTURE



A&R - Accreditation & Ranking
 AA - Academic Affair
 ARC - Alumni Relation Cell
 BoG - Board of Governors
 BWC - Building Works Committee
 CCE - Centre for Continuing Education
 CDC - Career Development Cell
 Coord. - Coordinator
 Estb. - Establishment
 FC - Finance Committee
 FIC - Faculty-In-charge
 Fin. Cont. - Finance Controller
 FW - Faculty Welfare
 HoD - Head of Department
 ICT - Information and Communication Technology
 IISD - Innovation, Incubation & Skill Development
 Int./Pl. - Internship/Placement
 Lib. - Library
 M&C - Medical & Counselling
 P&D - Planning & Development
 PRO/FIC - Public Relations Officer
 RG&C - Research Grants and Consultancy
 S&P - Store & purchase
 SAC - Student Activity Center
 Sch. - Scholarship
 SW - Student Welfare

1.7 GOVERNING BODIES

Board of Governors

Sr. No.	Members	Name	Nominated/ Ex-officio
1	Chairperson	Sh. Ravi Sharma	Ex officio
2	Nominee of Central Government	Ms. Soumya Gupta Joint Secretary (TE), Deptt. of HE, MoE	Nominated
3	Nominee of State Government	The Secretary (TE, Vocational & Industrial Training) to the Govt. of HP (on 13.06.24)	Nominated
4	Three eminent persons, of which at least one shall be a woman, appointed by the Board out of industry, research laboratories, and civil society, one from each category	To be Nominated (Under Process)	
5	Two Eminent Academician	To be Nominated (Under Process)	
6	One Nomine representing each of Industry partner	HPPCL Sh. Shivam Pratap Singh Director (Personnel/Finance) HPPCL (on 30.05.24)	Nominated
		HPPTCL Er. Ashwani Kumar Khanotia Director (P&C) HPPTCL (on 03.06.24)	
7	Director of IIT or NIT located in the region	To be Nominated (Under Process)	
8	Two members from the faculty of the Institute, preferably one Professor and one Associate/ Assistant Professor, to be nominated by the Senate	To be Nominated (Under Process)	
9	One person from SC or ST community in the field of education or industry or social service in case above don not belong to SC or ST	To be Nominated (Under Process)	
10	Director	Prof. Manish Gaur	Ex officio
11	Registrar, Non-member	Mr. Lagvish Kumar	Ex officio

Finance Committee

Sr. No.	Members		Name	Nominated/ Ex-officio
1	Chairperson of the Board	Chairperson	Sh. Ravi Sharma	Ex officio
2	One representative of the Government of India, Ministry of Human Resource Development, Department of Higher Education handling the matters relating to finance		Shri. Mukesh Kumar Director Finance, MoE	Ex officio
3	One representative of the State Government in which the Institute is located		The Director Directorate of Technical Education, Sunder Nagar	Ex officio
4	One representative of the industry partners chosen from amongst themselves		Er. Ashwani Kumar Khanotia Director (P&C) HPPTCL	Nominated
5	Director		Prof. Manish Gaur	Ex officio
6	The officer in-charge of finance and accounts of the Institute	Secretary	Mr. Lagvish Kumar	Ex officio

Senate

Sr. No.	Members		Name	Nominated/ Ex-officio
1	The Director	Chairperson	Prof. Manish Gaur	Ex officio
2	All Deans		Vacant	
3	Head of Department	SoC	Dr. Shatrughan Modi	Ex officio
		SoE	Dr. Ankur Kumar	
4	All full-time professors other than the Deans or heads of the Departments		Vacant	
5	Three persons from amongst educationists of repute or persons from another field related to the activities of the Institute who are not in service of the Institute, nominated by the Board		To be Nominated (Under Process)	
6	Three persons who are not members of teaching staff co-opted by the Senate for their specialized knowledge		Prof. Vrijendra Singh IIT Allahabad	Nominated
			Prof. Sandeep Shukla IIT Kanpur	
			Prof. S. Arun Kumar IIT Delhi	
7	Registrar	Secretary	Mr. Lagvish Kumar	Ex officio

Building Works Committee

Sr. No.	Members		Name	Nominated/ Ex-officio
1	The Director, Chairperson	Chairperson	Prof. Manish Gaur (Director)	Ex-officio
2	Nominee of the Government of India on the Board or his nominee		Prof. Rajneesh Sharma (Assoc. Prof., IIT Mandi)	Nominated
3	Nominee of the State Government on the Board or his nominee		Shri. Akshay Sood (Director, Technical Education, GoHP)	Nominated
4	Member of the Board belonging to an industry partner or his nominee		Shri. Shivam Pratap Singh (Director, HPPCL)	Nominated
5	Two Deans of the Institute, one handling Estate Matters and the other to be nominated by the Director		Dr. Sanjit Ningthoujam (F.I.C, Estate)	Nominated
			Er. T.S. Anand (E.E, IIT Ropar)	
6	Two experts from outside the Institute, appointed by the Board		Shri. Manoj Kumar (S.E, CPWD Shimla)	Nominated
			Shri. Balraj Sangar (S.E, HPSEBL)	
7	The Officer in-charge of Estate of the Institute or Registrar if he is the officer in-charge of the Estate	Secretary	Shri. Lagvish Malhotra (Registrar, IIIT Una)	Ex-officio

1.8 DEANS/FACULTY IN-CHARGES

Sr. No.	Role and Responsibility	Faculty Member
1	Faculty In-charge Research and Consultancy	Dr. Ambigavathi M.
2	Faculty In-charge Library	Dr. Ashwini Kumar Malviya
3	Faculty In-charge Store and Purchase	Dr. Mrityunjay Singh
4	Faculty In-charge Career Development Cell	Dr. Nishtha Hooda
5	Faculty In-charge Estate	Dr. Sanjit Ningthoujam
6	Head (SoC) Faculty In-charge (ICT)	Dr. Shatrughan Modi
7	Hostel Warden (CH)	Dr. Shiv Dutt Sharma
8	Faculty In-charge Planning and Development	Dr. Vikram Kumar
9	Head (SoE)	Dr. Ankur Kumar
10	Hostel Warden (BH-Girls)	Dr. Gurpreet Kaur
11	Faculty In-charge Academic Affair	Dr. Naman Garg
12	Faculty In-charge Student Welfare	Dr. Naveen Cheggoju
13	Faculty In-charge Centre for Continuing Education	Dr. Shonal Chouksey
14	Hostel Warden (JH)	Dr. Vejandla Kishore

1.5 INFRASTRUCTURE



The Institute campus extends over an area of 63 acres. Tastefully laid out with the picturesque landscape and with numerous buildings of various types and, with clean and wide roads, the campus presents a spectacle of harmony in architecture and natural beauty. The salient features of self sustainable campus are as follows:

- Green cover (~60%)
- Zero waste campus
- Disable friendly campus
- Fully functional Water Treatment Plant (WTP)
- Fully functional Sewerage Treatment Plant (STP)
- 24X7 Uninterrupted power supply
- Solar Power Plant (work in progress)

Sr. No.	Bulinding Name	Structure
1	Academic Block	G+3
2	Admin Block	G+1
3	Hostel-I, II, III	G+3
6	Transit House	G+2
7	Director Residence	G+1

• Infrastructure raised in FY 2022-23

- Cycle stand
- Pond restoration
- Open air auditorium
- Canteen
- Stationary shop
- Pathway to hostel-III

ACADEMIC BLOCK

The academic block (Area: 10770 sq.m.) consists of 12 Classrooms, 18 Labs, 05 Examination halls, 02 lecture halls, 01 library, 40 faculty and research scholar rooms. The entire building is equipped with centralized Hot & Cold AC, full CCTV coverage, and available with disable friendly provisions.

The details of the various state-of-the-art academic facilities in this block are as given next.



Trinetra (High Performance Computing)

This lab offers high performance computing facilities to explore various dimensions of fields such as Artificial Intelligence, Machine Learning, Data Science, and Cyber Security. The students are expected to develop technology based solutions to locally relevant problems using this computing facility.

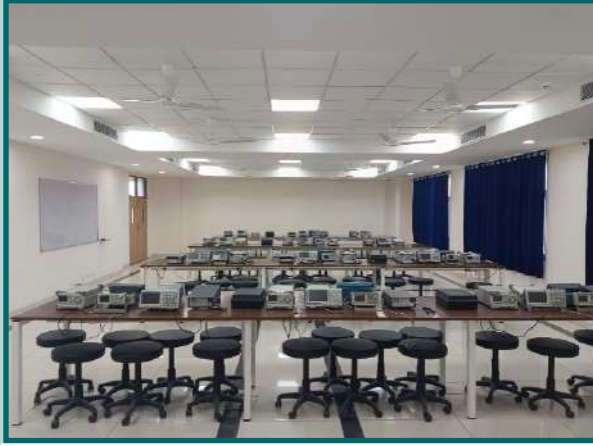
Maya Netra (AR/VR)

Maya Netra provides immersive experiences and advanced tools for exploring augmented and virtual reality. This lab exemplifies IIIT Una's commitment to driving technological advancement and equipping students and researchers with the resources they need to excel in an ever-evolving tech landscape.



Computer Labs

The institute has seven different computer labs equipped with more than 350 state-of-the-art computing systems to ensure the smooth conduct of the teaching and learning activities of the institute. The labs are available with various software tools such as MATLAB, Orell Talk, different Programming Languages, Cisco Packet Tracer, Visual Studio, etc.



ECE Hardware Lab

This lab is a dedicated facility for hands-on experimentation in electronics. The lab fosters practical skills in circuit analysis, troubleshooting, and the implementation of various devices. List of Major Equipment include 70MHZ DSO inbuilt Function Generator, Digital IC Tester, Function Generator, Three Channel Power Supply (Programmable), 0-30v/0- 3Amp, Digital Multimeter Handheld, LCR Q Meter, etc.

Microwave Lab

This lab is a specialized facility equipped for experimentation with microwave frequencies and Communication system. The equipment list include Klystron Based microwave test Bench, Gunn Based microwave test Bench, VSWR Meter Solid State, Klystron tube, Klystron mount, Isolator, Variable attenuator, Magic Tee, AM modulator and demodulator training kit, FM modulator and demodulator training kit, PAM, PPM, PWM and Line Coding training kit, DM, ADM, DELTA training kit, etc.



Digital & Microprocessor Lab

The lab is dedicated to practical electronics experiments and provides equipment for digital systems, Microprocessor 8085, 8086, and Microcontroller 8051. Students and researchers can design, build, and test digital circuits. The lab focuses on circuit analysis, troubleshooting, and device implementation, enhancing understanding in electronics engineering.



Hybrid Lab

This lab fosters practical skills in circuit Printing, troubleshooting, and the implementation of various devices. It serves as a crucial space for learning about circuit designs, Testing, component placement, soldering, inspection and more. With a focus on experiential learning, the lab enhances understanding and proficiency in the field of electronics engineering. List of Major Equipment's: PCB (Printed Circuit Board) machine, 3D Printing machine

ECE Software Lab

This lab is dedicated for VLSI, Microwave Engineering, VHDL and Data Communication & Networks. The lab is equipped with latest tools such as Cadence, Xilinx (Vivado), and Cisco Packet Tracer. The lab is also available with hardware FPGA Board for VHDL experiments.



Electrical Lab

This Lab is used to familiarize the students with fundamental concepts in electrical engineering through hands-on experiments and practical demonstrations List of major Equipment: Dimmer stat AC (0-240V), Voltmeter AC/DC (0-300/600V), Voltmeter AC/DC (0-150/300V), Transformer, Resistive Load, Sliding Rheostat (56 Ω), Wattmeter with Low power factor, Ammeter AC/DC (0-5/10A), etc.



Computer Lab 104

This lab is dedicated for Signals and Systems, DSP, Fiber Optic Communication, Control Systems, and Artificial Neural Networks, Introduction to Python. Softwares used for experiments are MATLAB, Python, and Lab View.

Engineering Physics Lab

The Physics lab features a diverse selection of experiments that explore phenomena in modern physics, including the wave-particle duality of light, Interference, Electron-Diffraction, the Hall effect, characteristics of Semiconductor, Resonance in LCR, and the Magnetic behavior of iron cores, etc. These experiments not only illustrate fundamental concepts but also introduce students to various measurement techniques, bridging the gap between theory and practice.



Chemistry Lab

The chemistry lab offers a comprehensive range of experiments, providing students with hands-on experience in key analytical techniques. Students investigate acid strength, liquid properties, and polymer preparation. Advanced experiments like chromatography and Winkler's Method prepare students for chemistry challenges in academia and industry.



Library

The institute library is a vibrant learning hub, offering a vast collection of books, journals, and digital resources. Quiet study spaces, flexible hours, comfortable seating, and adaptive technology ensure a supportive and inclusive environment for all learners.

Class Room

The classrooms are vibrant learning spaces, equipped with state-of-the-art facilities to foster academic excellence. Each classroom is equipped with spacious and comfortable seating, centralized hot & cold AC, advanced multimedia systems, modern amenities, such as audio-visual equipment and CCTV.





Hostels

The Institute has 03 Hostels, each with capacity of 278 students with area of 4970 sq.m. All the hostels are equipped with Wi-Fi6 internet facility. The hostels are fully monitored with CCTV system. To ensure round the clock security, each hostel has dedicated security personnels and hostel attendants.

The hostel is equipped with necessary fire safety provisions and disabled-friendly infrastructure. Each hostel has an indoor stadium, dedicated laundry rooms, and mess facility with modern kitchen in addition to Two Lifts, Electric Water Heater, UPS and DG Backup.

The Institute has a plan to construct new hostel (750 capacity) and shopping complex through DEA empaneled transaction advisor.



Sports, Music, & Gymnasium

The Institute has sports facilities conforming to the standards. The various sports facilities available in the premises are as follows:

- | | | |
|-------------------------------|--------------------------------------|--------------------|
| 1. Cricket Ground | 2. Basketball Ground | 3. Football Ground |
| 4. Athletic Track | 5. Volleyball Ground | 6. Lawn Tennis |
| 7. Multiple Badminton Grounds | 8. Indoor Sports Room in each hostel | |

The Institute has dedicated sports staff to train students in various sports activities. The Institute encourage the students to conduct regular sports activities. The Institute also facilitate the students to participate in various inter institutional sports events.

In addition, the Institute has setup dedicated music room for music lovers.

The Institute believes in the philosophy of “Healthy Mind Lives in a Healthy Body”. Therefore, the Institute has a well equipped gymnasium facility to take care the physical fitness.



Transit House & Health Care

The Institute guest house is well equipped rooms and suits to accommodate institute visitors. Round the clock guest house staff is available to take care the visitors.

The total area of Transit House is 1512 sq.m. The Transit House is available with Gymnasium, Institute Health Centre, Music/Dance Room, Dining Hall, Lounge Room, 12 Guest Rooms, Lift facility, UPS and DG Backup, Wi-Fi, Split ACs, CCTV, Fire Fighting System, Disable Friendly Provisions.

The Institute also has attached Health Centre for primary health care needs in case any medical emergency. The Transit House also has all the necessary disable friendly provisions.

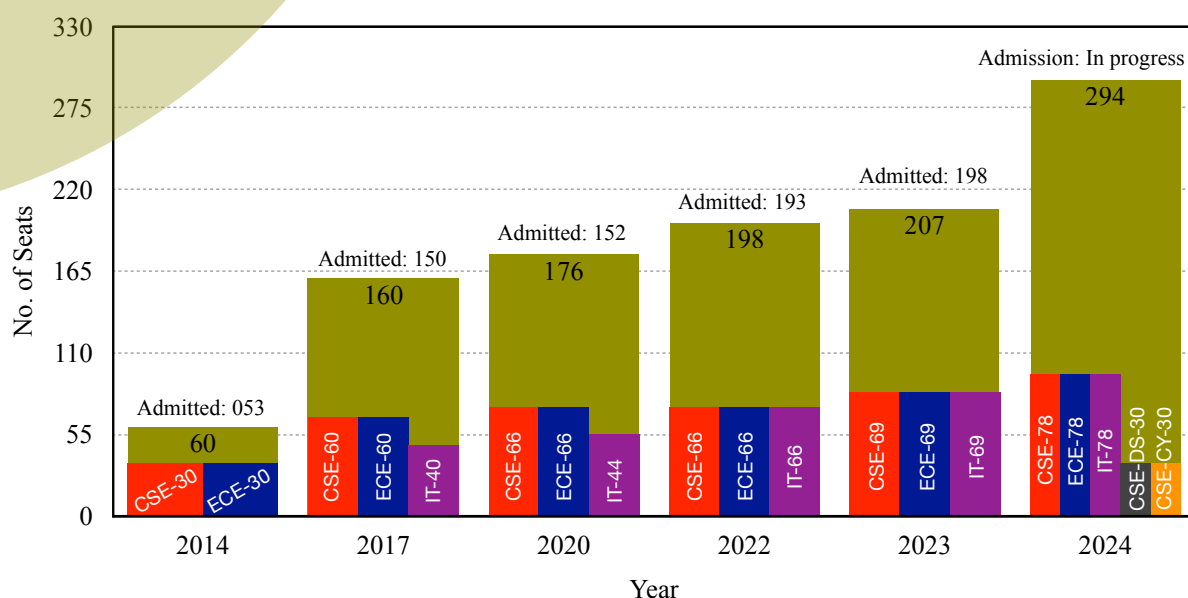


2. ACADEMICS

2.1 PROGRAMS OFFERED

The Institute consists of three academic units namely School of Computing (SoC), School of Electronics (SoE), and School of Basic Sciences (SoBS). The Institute currently offering three UG programs, one PG program, and PhD in various fields. The details of the programs offered are as follows:

UG Journey Highlights



Undergraduate Programs (UG)

- 1. B.Tech. CSE:** This program provides a solid foundation in computer science, covering areas such as algorithms, programming, software development, and systems engineering.
- 2. B.Tech. IT:** This program covers a broad spectrum of IT topics, this program includes coursework in software development, networking, and information systems management.
- 3. B.Tech. ECE:** This program combines the principles of electronics and communication, preparing students for careers in telecommunications, signal processing, VLSI, and related fields.

UG Programs from AY 2024-25

- 1. B.Tech. CSE (Data Science):** Focused on data analytics, machine learning, and big data technologies, this program prepares students for careers in the growing field of data science.
- 2. B.Tech. CSE (Cyber Security):** This program emphasizes the principles and practices of protecting information systems, preparing students for roles in cybersecurity and digital forensics.

Programs Highlights

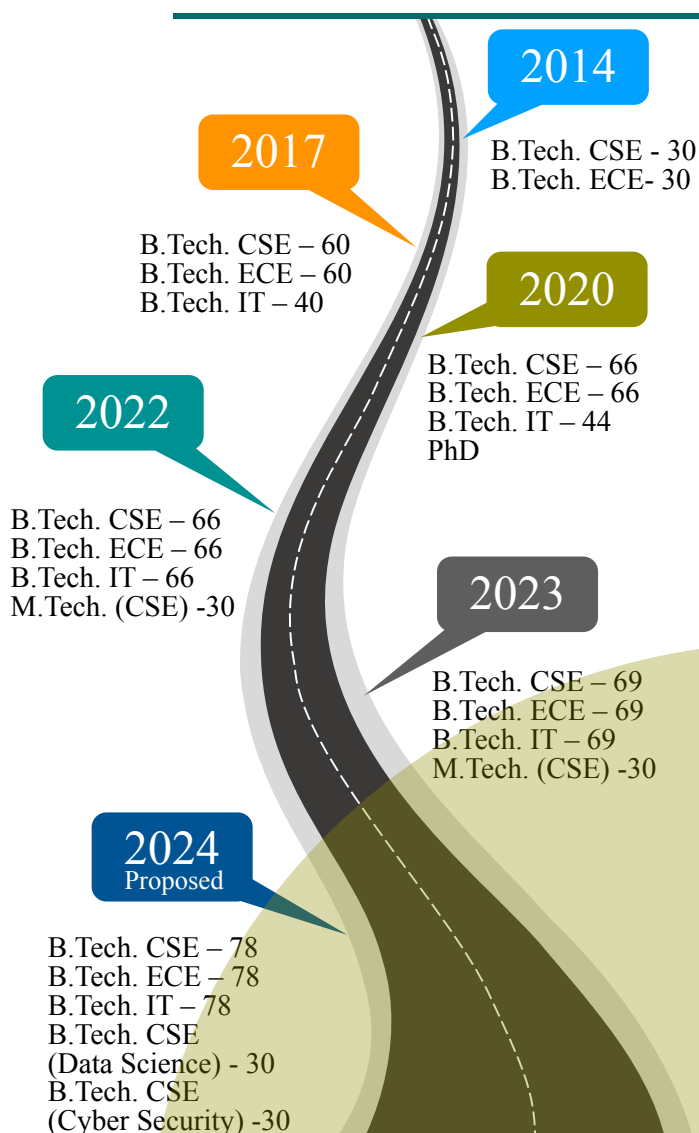
- ✓ Practical and Skill Oriented Programs
- ✓ Latest Curriculum
- ✓ Industry Aligned Programs
- ✓ Qualified Faculty from INIs and Foreign Universities
- ✓ NEP 2020 compliance
- ✓ Industry collaborations for real world exposure.

Postgraduate Programs (PG)

1. **Master of Technology (M.Tech.) in CSE with Specializations in Cyber Security and Data Science:** This advanced program allows students to deepen their knowledge in specialized areas of computer science, focusing on the latest technologies and research in cyber security and data analytics.

Doctoral Programs (PhD)

1. **PhD in the School of Computing:** Focused on advanced research in computing technologies, algorithms, and systems.
2. **PhD in the School of Electronics:** Dedicated to research in electronic systems, communication technologies, and signal processing.
3. **PhD in the School of Basic Sciences:** Engages in fundamental research across various scientific disciplines, supporting the advancement of technology through basic scientific discoveries.

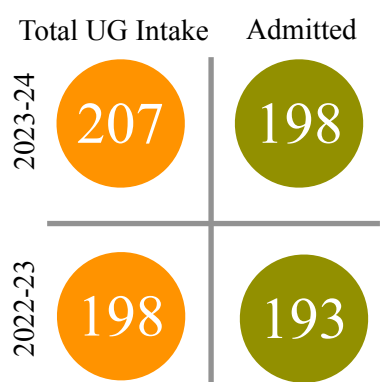


2.2 ADMISSION STATUS

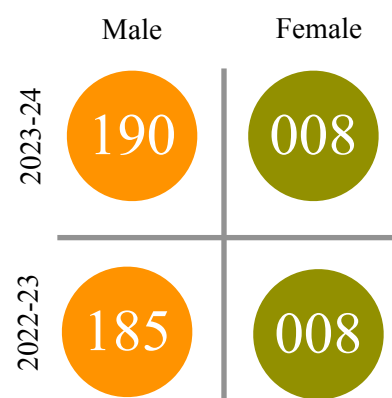
The institute admits its 100% seats through JoSAA/CSAB counseling process on all India ranking basis. The quality of teaching and learning practices followed by the Institute has resulted nearly 100% admissions in all the UG branches as evident in the data presented below. The Institute has positioned itself in the respected opening and closing ranks brackets for all the branches.

The Institute also offered M.Tech. (CSE) in the academic year 2022-23 and 2023-24, however there was no admission in this program. The Institute is looking for ways to improve the visibility of master programs. It is worth to mention that the Institute has received a good response for its PhD program. Number of PhD scholars admitted in the year 2022-23 and 2023-24 are 04 and 10 respectively.

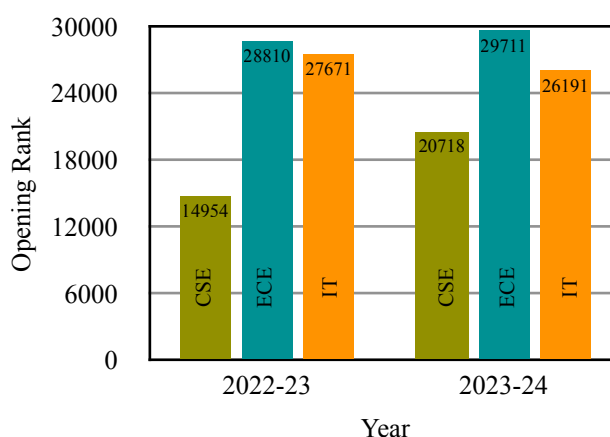
The Institute is in the process of establishing state-of-the-art laboratory facilities in the campus to improve the opening and closing ranks of UG programs and better penetration of its PG/PhD programs in coming years. In addition, the low number of female students in the campus is also of great concern. The Institute is planing to conduct various online/offline awareness campaigns to attract more number of female students in future.



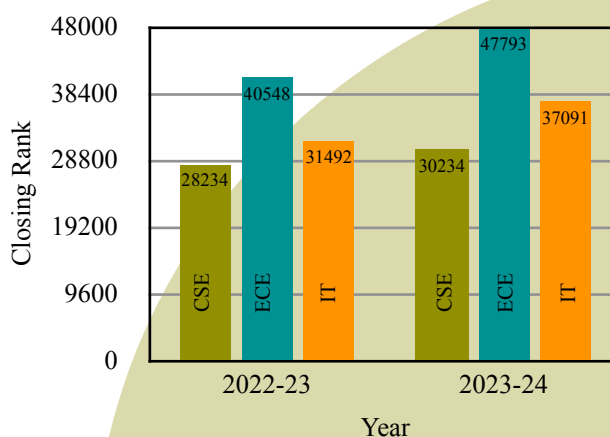
UG intake and admitted students



UG male and female strength



Branch wise opening rank

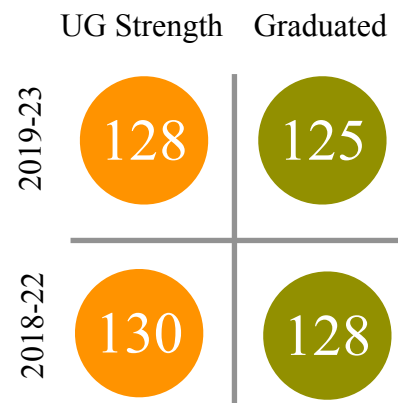


Branch wise closing rank

2.3 GRADUATION STATUS

The institute admitted its first batch of UG students in year 2014. The institute so far has conducted 05 convocations and awarded B.Tech. degrees to the students, who have successfully completed the respective program of study. The institute also has the provision to award B.Tech. honors to the selected students fulfilling the criteria laid down for the same.

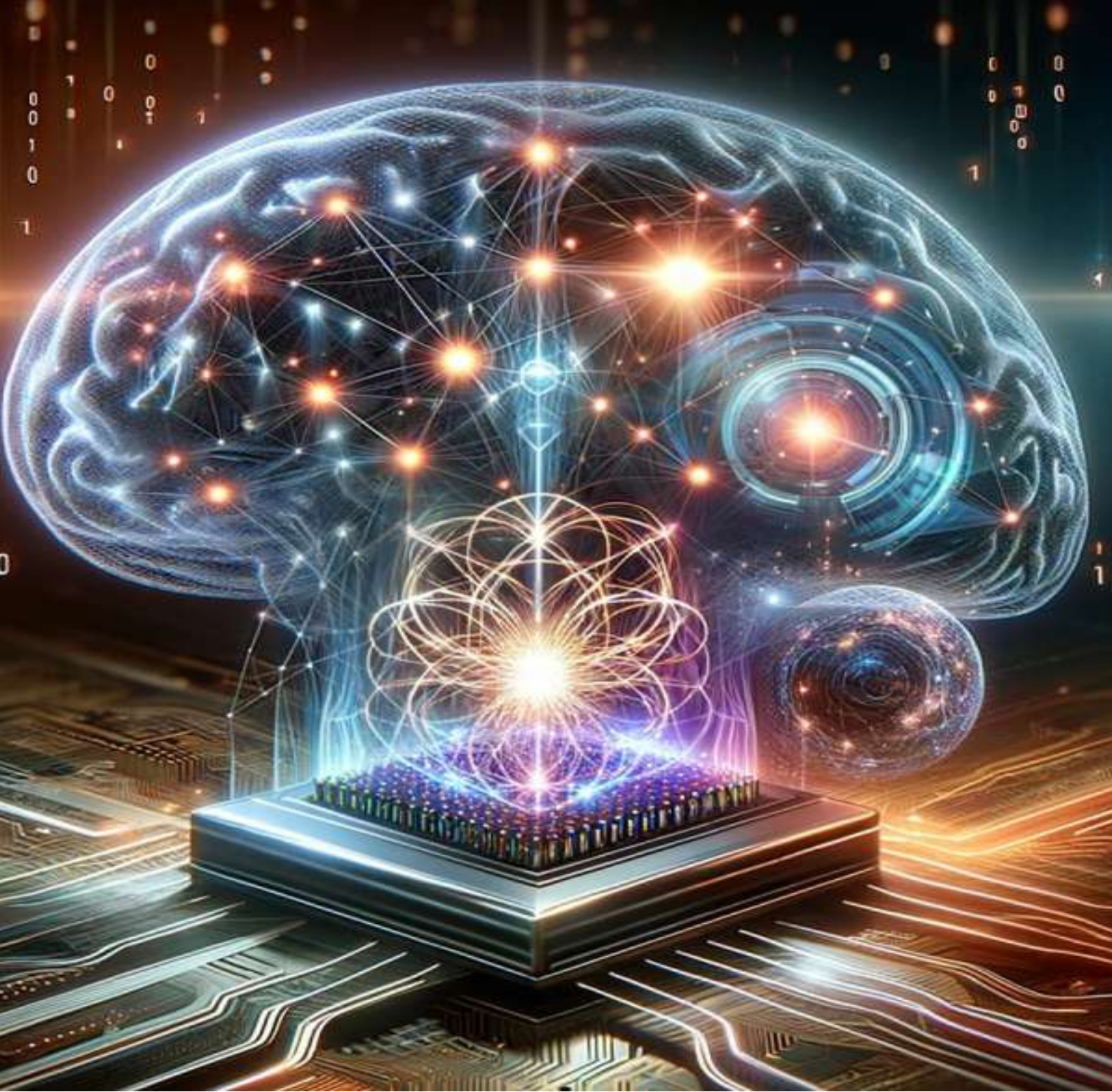
The institute admitted a total of 128 students in the batch 2019-23. Out of 128 students, 125 students have successfully completed their B.Tech. program and are now eligible for award of B.Tech. degree. The institute is planning to conduct the graduation ceremony for these students along with batch 2020-24 in Aug./Sept. 2024.



Batch-wise UG strength and graduation status

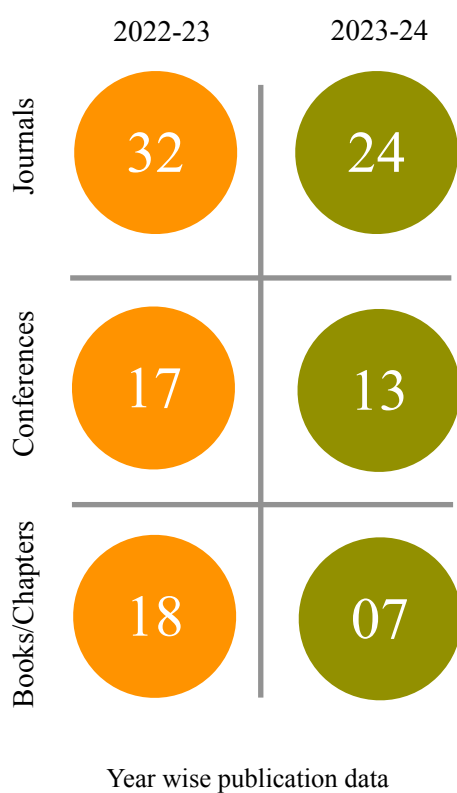
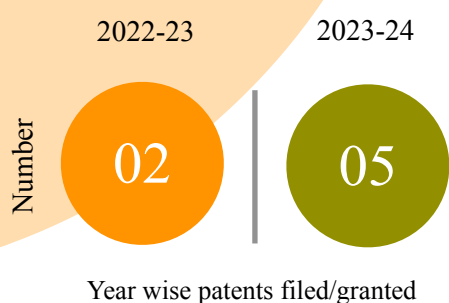
Medal Winners 2020-24

			
CSE	 Mr. Varun Prohit	 Ms. Shubhi Arora	 Ms. Mitali Jain
ECE	 Mr. Sarthak G. Vishnu	 Mr. Priyam Harsh	 Mr. Mohit Bagdi
IT	 Ms. Nikita Jain	 Mr. Divyansh Jindal	 Mr. Aryan Tyagi



3. RESEARCH

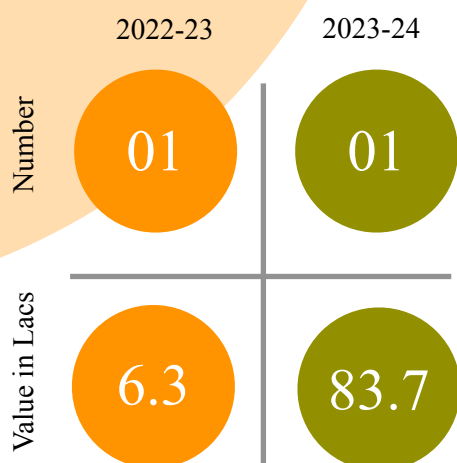
3.1 PATENTS & PUBLICATIONS



Patents Filed/Granted

1. Geetika Bajaj, Shonal Chouksey, Amit Kumar Roy, Darshan Thakare, Seshadri Ganguly, Gopi Chandran Ramachandran, Srinivas Gandikota, Jayeeta Sen “Atomic Layer Deposition Of High Dielectric Constant Materials” US Patent Application No. US20230420486A1 filed on June 12, 2023.
2. Geetika Bajaj, Amit Kumar Roy, Shonal Chouksey, Seshadri Ganguly, Gopi Chandran Ramachandran, Srinivas Gandikota “Atomic Layer Deposition Using Novel Oxygen-Containing Precursors” US Patent Application No. US20230416915A1 filed on June 12, 2023.
3. Epiderma (Application Number: 202211034085) [Published].
4. Varsha, Jyoteesh Malhotra, GS Grewal, Gurpreet Kaur, et al., “IoT Based Desalination Device”, Journal No. 30/2023, Journal date 28, July’23, Design no. 349714-001, Intellectual Property Rights, Govt. of India.
5. Indoor Air Filtration Device (Application Number: 202111000131), Portable Hand Acupressure Device (Application Number: 202011043141, Patent No. 465587)

3.2 SPONSORED PROJECTS



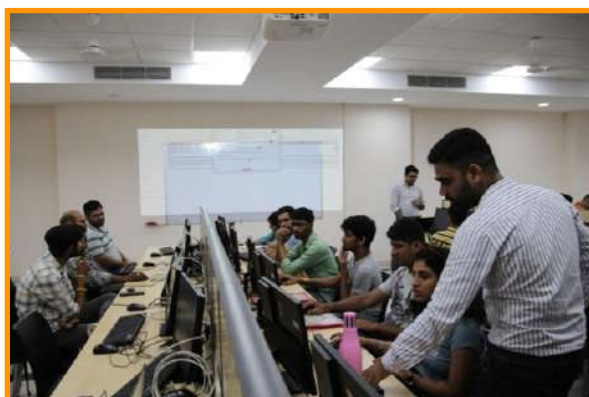
Year wise funded projects

- 1. Stri-Sakhi:** An Intelligent Medical Assistant for Women.
Sanction year 2022-23
PI: Dr. Nishtha Hooda
Co-PI1: Dr. Vikram Kumar
The Project aims to develop an LLM-powered chatbot that can provide medical assistance to women with some selected diseases. The overall aim of the project is to improve the health of females in Himachal Pradesh.
Funding Agency: HIMCOSTE, Govt. of Himachal Pradesh.
Funding Value: INR 6.30L.

- 2. CBDE-MoE:**
Sanction year 2023-24
PI: Dr. Tanu Wadhwa
Co-PI1: Dr. Ankur Kumar
Co-PI2: Dr. Naman Garg
The objective of the Capacity Building for Design and Entrepreneurship program is to enhance the capacity of faculty and HEIs for creative transformation with a specific focus towards design and entrepreneurship development.
Funding Agency: MoE, Govt. of India.
Funding Value: INR 83.70L.

3.3 WORKSHOPS/CONFERENCES ORGANIZED

1. Short Training Course: Road to Research Publication: New Perspectives for Success held from 25-29 September 2023, at the School of Basic Sciences.
2. Workshop: Recent Advancements in VLSI Design and its Applications, 04-08 July 2023.
3. Workshop: Recent Developments in Machine Learning and its Applications, held on 05-09 June 2023.
4. IT Workshop for Police Officials, from 25-29 July 2023.
5. International Conference: Soft Computing Theories and Applications (SoCTA), 24-26 December 2023.



3.4 FACULTY RESEARCH AREAS

S. No.	Name of the Faculty	Research Area/Specialization
1	Dr. Laxmanika	Digital Image Processing and Watermarking
2	Dr. Sanjit Ningthoujam	IoT, Molecular Communications, and Machine Learning
3	Dr. Vikram Kumar	Generative AI, Large Language Models, WSN
4	Dr. Nishtha Hooda	Big Data Analytics and Healthcare
5	Mr. Divyansh Thakur	Embedded Artificial Intelligence, Deep Neural Networks, IoT
6	Dr. Prachi Arora	Microbiology & Computer Vision
7	Ms. Minakshi Shastri	Network Security
8	Dr. Ambigavathi M.	Internet of Everything, Sustainable Edge Computing, Extended Reality, Digital Twins, and Cobotics
9	Ms. Nisha	Internet of Video Things
10	Dr. Ashwini Kumar Malviya	Cryptology, Quantum Computing
11	Dr. Mrityunjay Singh	Federated learning/Machine learning
12	Mr. Satish Kumar	Operating Systems
13	Ms. Hem Lata	Artificial Intelligence, Android Application Development
14	Dr. Shatrughan Modi	Machine/Deep Learning
15	Dr. Shiv Dutt Sharma	Algorithms, Computational Algebra, Deep Learning and Machine Learning
16	Dr. Neha Sharma	Deep learning applications
17	Dr. Prince Sharma	Computer Networks and Social Network Analysis
18	Dr. Shonal Chouksey	Microelectronics and VLSI, Semiconductor Device Technology
19	Dr. Satendra Kumar	High Energy Physics, Collider Physics
20	Dr. Ankur Kumar	Low Power VLSI Circuits and Semiconductor Devices

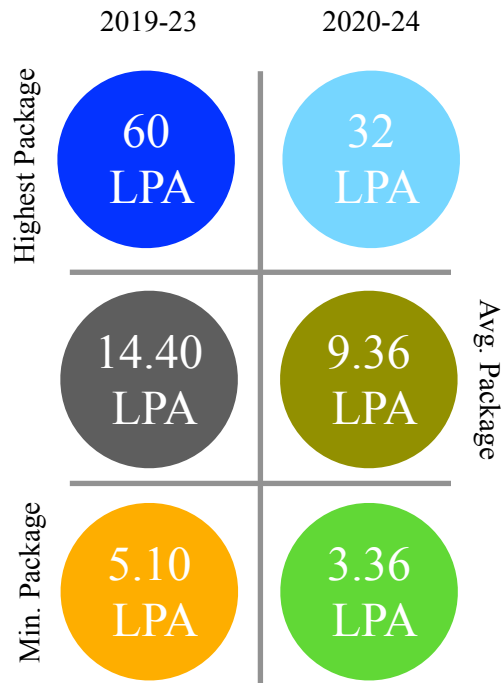
S. No.	Name of the Faculty	Research Area/Specialization
21	Dr. Gurpreet Kaur	Communication Systems
22	Dr. Naman Garg	Signal Processing, Quantum Computing
23	Dr. Naveen Cheggoju	Computer Vision, Multimedia Computing, Next Generation Image Compression, Machine Learning
24	Dr. Madan Verma	Nanobiotechnology, Bioinformatics
25	Mr. Satish Kumar	VLSI Design
26	Dr. Ankur Thakur	Wireless Communication and Signal Processing
27	Dr. Nikunj Goyal	RF and Microwave Engineering
28	Dr. Payal Sharma	Higher Education, Faculty Development, Training and Development
29	Dr. Vandita Sharma	Scientific Computing, Partial differential Equations
30	Ms. Pranshu Sharma	VLSI, Signal Processing and Machine Learning
31	Dr. Vejandla Kishore	Wireless Communications, 6G
32	Dr. Jaspreet Kaur	Nanotechnology and Material Chemistry
33	Ms. Manu Chauhan	Graphic medicine and trauma studies
34	Dr. Bhavna	Linguistics



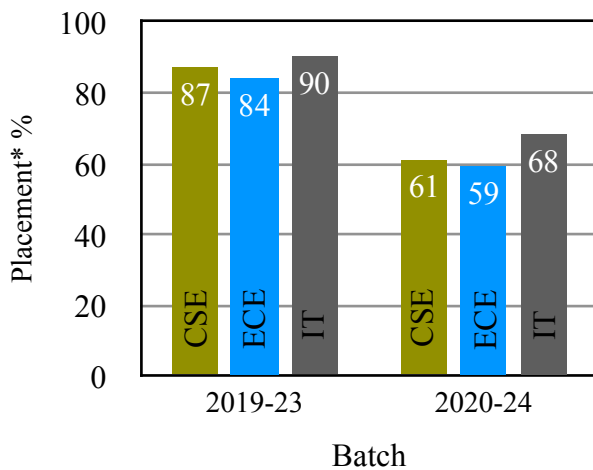
4. PLACEMENTS

4.1 PLACEMENT STATISTICS

The institute has a dedicated placement cell to bridge the gap between students and potential employers. The key functions of a placement cell include organizing campus placements, inviting companies for recruitment drives, coordinating pre-placement talks and interviews, and providing career guidance and training to students. By actively engaging with industry partners and understanding market trends, placement cells aim to enhance students' employability and ensure successful career transitions to post-graduation. The cell is coordinated by faculty In-charge and students are expected to executed most of the training and placement activities under the guidance of Faculty In-charge.



Packages highlights



Branch wise placement statistics

The institute witnessed drop in placement performance compare to the last year. The reasons for the same can be attributed to overall market slowdown in country and worldwide in general. The Institute is planing to focus more on training activities, start-ups, and incubation to increase the employment opportunities in the coming years.

Major Recruiters



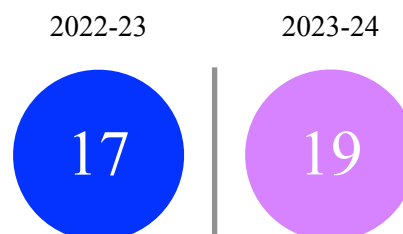
* This does not include who have opted for higher education.



5. Events & Outreach Activities

5.1 EVENTS ORGANIZED

The institute has organized various events to ensure the multidimensional development and exposure to the students. The various events organized includes orientation program for first year students, industry interactions, expert talks, and various national and international events following the guidelines of Govt. of India from time to time. The details of various events organized along with some selected photographs is given next.



No. of events organized

1 Orientation Program

The institute has organized orientation program for batch 2023-27 from 23-Aug-2023 to 01-Sept.-2023. The program consists of a multiple sessions from industry experts, eminent academicians, and various govt. officials. The aim of this program is to sensitize the students towards real life and encourage them to excel in their field of interest. During this time, institute also conducts diagnostics test for various subjects such as English, Maths, and Computers to assess the proficiency level and plan for the bridge courses to meet the deficiencies, if any.



2 Drug Awareness

The Drug Demand Reduction, De-addiction Camp; Rehabilitation is being conducted by the Indian Institute of Information Technology Una Himachal Pradesh. The various activities consisted of establishing of Red Ribbon Clubs, and Expert Talks from the Medical Officer, Govt. Hospital Una HP. In the recent past, various medical officers visited our institute to deliver a talk on various communicable and non-communicable diseases including drug demand reduction, de-addiction and rehabilitation response.

3 Kathak- Spic Makay

In November 2023, in collaboration with SPIC MAKAY our institute had the privilege of hosting Malti Shyam, one of India’s foremost exponents of the Lucknow Gharana of Kathak, for an enchanting performance. Her grace, technical precision, and emotive storytelling left the audience spellbound. This event highlighted the rich cultural heritage of Kathak and provided a profound artistic experience, inspiring both students and faculty.



4 Jan Bhagidari Events

Jan Bhagidari Events during India G20 Presidency between 02-13, Mar.'23. The Indian Institute of Information Technology Una, Himachal Pradesh conducted various activities in Jan Bhagidari Events during India G20 Presidency. The details of the events were as follows: i) Cleanliness drive, ii) Plantation drive iii) Running drive.

5 Vigilance Awareness Week

The Indian Institute of Information Technology Una celebrated Vigilance Awareness Week with the theme of “Say no to Corruption, commit to the Nation” from 30, Oct.’23 to 05, Nov.’23. The activities consisted of the pledge taking and an Expert talk delivered by Shri BalBir Singh, Superintendent of Police, State Vigilance and Anti-Corruption Bureau, Dharamshala, Kangra, Himachal Pradesh.



6 Expert Talk on Digital Forensics

The institute organized an event on 09, Dec.'23 featuring cyber security experts from Central Detective Training Institute, Sh. Gurcharan Singh, a distinguished expert with over 20 years of hands-on experience in cybersecurity. He suggested various career opportunities in the government organizations, and urged the students to start exploring career opportunities in the digital forensics domain. Because of the live demonstration, the overall session was very interactive, engaging, and very appreciated by the students.



7 Visitor from World Bank USA

The Institute hosted Shri Rajendra Singh, senior digital development specialist, World Bank, Washington DC, USA on 16, Feb.'24. Shri Singh Shared his versatile experience about engineering, education and its role, and technology based projects executed by World Bank. He also emphasized how humanity is the best asset of human-being.

8 International Yoga Day

Celebration of 9th International Day (21, Jun.'23) of Yoga (IDY): The International Day of Yoga (IDY) was celebrated by the Indian Institute of Information Technology Una Himachal Pradesh. The various activities consisted of practices of yoga sessions of Upa Yoga, Surya Namaskar, and Meditation.



9 Single Plastic Use

Our institute has prohibited the identified 12 Single-Use Plastic items (which have low utility and high littering potential) mentioned in the Plastic Waste Management Amendment Rules-2021 by 2022. The identified Single-Use Plastic items are completely banned from our institute campus by adopting the stringent check on visitors/vendors supplying groceries to the hostel mess.



10 World Environment Day

The World Environment Day was celebrated on 05, Jun.'23 by the Indian Institute of Information Technology Una Himachal Pradesh. The activities consisted of the Running drive, Cleanliness drive, and plantation drive.

11 Industry Interaction

The Institute organized a visit of the CEO: Shri Sunil Goyal, and the CTO: Shri Rajeev Singh of Sopra Steria India on 27, Oct.'23. Both the guests interacted with students and faculty members of the Institute and shared their invaluable experience and current practices and trends in IT industry.



12 National Unity Day

The Indian Institute of Information Technology Una celebrated Rashtriya Ekta Diwas under the banner of National Unity Day-2023 on 31, Oct.'23. The activities consisted of the pledge taking and Unity Run in the campus premises by students faculty members of the Institute.



13 Expert Talk

Prof. Nangia delivered a talk on “In the quest of the right answers”. His session was focused exclusively on interview tips and preparing students for the industry, which provided valuable insights, enabling students to navigate interviews confidently, showcase their skills, and seamlessly integrate into the professional world, paving the way for their career advancement.

14 IYoM

The International Year of Millets (IYoM) is being celebrated by the Indian Institute of Information Technology Una Himachal Pradesh. The various activities consisted of Quiz competition, and special millets dish preparation.



15 National Constitution Day

The Indian Institute of Information Technology Una celebrated the National Constitution Day. The activities consisted of the pledge taking, reading preamble online, and screening of a documentary movie on the Constitution Day.



16 Janjatiya Gaurav Diwas

The Indian Institute of Information Technology Una celebrated Janjatiya Gaurav Diwas-2023 on the birth anniversary of Bhagwan Birsa Munda. The activities consisted of the Enlighten students on the legacy of tribal leader, Bhagwan Birsa Munda by the Institute Literary Club, EUNOIA, Poetry recitation, and Speech Competition.

17 Swachata Pakhwada

The Indian Institute of Information Technology Una celebrated Swachhata pakhwada-2023 from 1st September to 15th September 2023. The activities consisted of the Cleanliness drive, and plantation drive within the campus as well as an outreach activity to sensitize the locals by visiting one of the adopted villages namely Badshali Har, Una, HP.





18 Swachata Hi Sewa Hai

The Indian Institute of Information Technology Una celebrated Ek Tareekh Ek Ghanta' under the banner of Swachhata Hi Seva-2023 on 01, Oct.'23. The activities consisted of the Cleanliness drive within the campus as well as an outreach activity to sensitize the locals by visiting one of the adopted villages namely Ghaluwal, Una, HP.

19 Meri Mati Mera Desh

Meri Maati Mera Desh campaign was celebrated by the Indian Institute of Information Technology Una Himachal Pradesh. The various activities consisted of pledge taking, and collection of soil/rice from the local residents.



5.2 LOCAL OUTREACH

01 School Visits

The institute organized multiple visits of the school students to make them aware about the Engineering Education System and admission process to the Institutions of National Importance. During the visits students were provided hands-on lab sessions by demonstrating simple experiments in the Physics, Chemistry, Electronics, and Computer Lab. In addition, students were given a complete tour of Institute campus.

S. No.	Event Date	School Name
1	03.02. 2024	GSSS Salaon
2	16.12.2023	SSRVM Sr. Secondary School, Takka Road Una
3	05.12.2023	Govt. Sr. Secondary School, Kharwar, Hamirpur
4	16.09.2023	GSSS Chauki Maniar
5	16.09.2023	GGSSS, Satsgarh
6	16.09.2023	GSSS Nangran
7	16.09.2023	Jawahar Navodya Vidhyalaya



IIIT Una promotes STEM education among school students

**KISHORI LAL BAINS
UNA, DEC 5**

Sarthak, a Social Responsibility Cell at Indian Institute of Information Technology Una organized a visit for 80 students of Government Senior Secondary School, Kharwar, Hamirpur to promote the importance of Science, Technology, Engineering, Mathematics (STEM) Education in schools. The faculty members of IIIT Una interacted with students to encourage girls and boys of class VI to VIII towards choosing science as their career and help them forming a stronger knowledge foundation. The students were exposed to the glory and magnificence of an Institute of National Importance. The aspiring engineers and science enthusiasts were also counselled about the necessary preparation required to take admission in an Institute of National Importance. An overwhelming enthusiasm was exhibited by students and their teachers while visiting the state-of-the-art sports facilities and laboratories available in Computer science, Electronics, Physics, and Chemistry departments.

The faculty members of Physics and Chemistry department helped them to explore foundational concepts in STEM disciplines and shared the experimental methods and techniques used in science labs. The teachers of the school shared that the visit was extremely engaging and helpful. It motivated the students and paved a way for them to aspire for bigger career goals in future. "STEM education goes beyond school subjects. It gives a skill set that governs the way any student thinks and behave which can further influence the society", said Prof. S. Selvakumar, the founder Director of IIIT Una while addressing the students. Ravi Sharma, Chairperson of BoG said, "India has a long history of innovation in STEM fields. However, in order to continue innovating, educational institutes should invest time and resources in STEM education."





6. HOLISTIC DEVELOPMENT

6.1 SPORTS

01 Yalgar

As a part of Institute day celebrations, Technical festival, Cultural festival, and Sports Festival were conducted on 29, Sep.'23-01, Oct.'23. The Sports festival, Yalgaar'23, was inaugurated grandly on 06, Sep.'23, by Shri. Ravi Sharma, Chairperson, BoG, IIIT Una in the presence of Prof. S. Selvakumar, Director, IIIT Una, Prof. Amar Nath Gill, Registrar, Faculty, Staff members and the Students. Institute had organized indoor, outdoor, and Athletics during the month long festival in September. As a part of indoor games, Badminton, Chess, Carrom, and Table tennis is being conducted. As a part of outdoor games Kabaddi, Volleyball, Football, Cricket, Lawn Tennis, and Basketball is being conducted. The winners in all these matches were honoured in the Institute Day on 03, Oct.'23 by the medals and trophies based on their performance in the events.



INTRA INSTITUTE EVENTS

	2022-23	2023-24
No. of Participants	303	566
No. of Medals	102	99
No. of Trophies	11	11

INTER INSTITUTE EVENTS

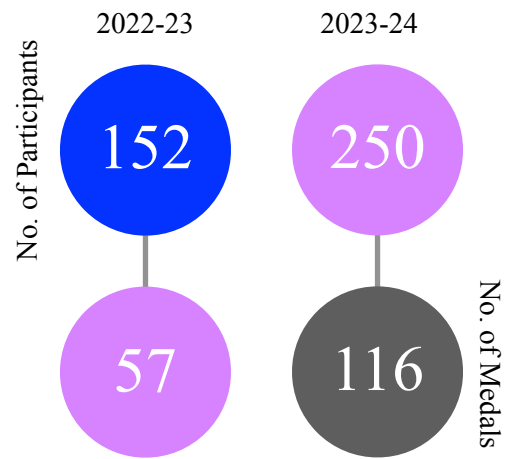
	2022-23	2023-24
No. of Participants	52	65
No. of Medals	05	21
No. of Trophies	01	01

6.2 TECHFEST

02 Meraki

The Institute organized a technical festival during 29-Sept.-2023 to 01-Oct.-2023. The inauguration event of technical festival witnessed the presence of the institute's director, Prof. S. Selvakumar, adding prestige to the occasion. The diverse range of events include coding competitions: "Coderation" and "Prog-o-thon", the adrenaline-pumping "Robo Drive", "Sold-Mold" the strategic "IPL Auction", and the mind-bending "Techcharades".

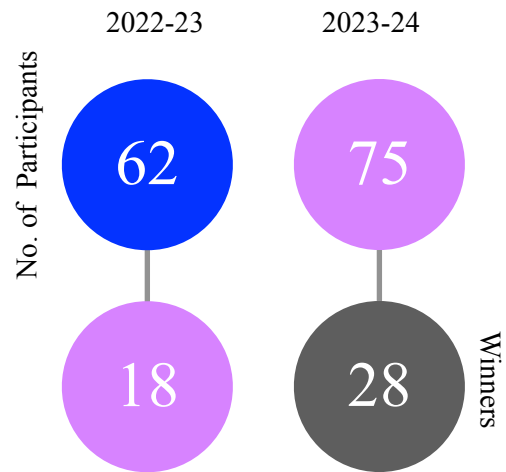
Institute Events



6.3 CULTURAL ACTIVITIES

03 Mridang

The Institute has celebrated the second cultural festival MRIDANG-2023 after witnessing the grand success of the first cultural festival conducted in October 2022. MRIDANG-2023 was inaugurated on 28, Sept.'23 by the flash-mob event presided by the Director, in the presence of all faculty members and students at the newly constructed Open Air Theatre (OAT) with the illustrious performances of the students on the stage. The various events organized under MRIDANG-2023 include Dance performances, Singing performances, Stand-up comedy, Skits, Debates, Charades, etc. The event has served as the platform to showcase their gifted talent on centre stage, and enjoy the culmination of a wonderful fest.





7. FINANCIAL

8.1 INCOME AND EXPENDITURE SUMMARY

The institute was established in 2014 under the parliamentary act IIIT (PPP) no. 23 of 2017. The Institute is operating on a Public-Private Partnership (PPP) model. It received a funding of 128 crore from its PPP partner for basic infrastructure development. The institute does not receive any government grants for its recurring or non-recurring expenses. All expenditures, including operational costs, are expected to be covered through fee receipts and additional revenue streams such as research consultancy. Below is the financial status report of the institute.

OH-35 Plan (Non-Recurring)

Sr. No.	Head of Accounts	2022-23 (in Cr.)	2023-24 (in Cr.)
1	A. Receipts		
2	Grant-in-Aid OH-35 Plan (Non-Recurring)	-	-
3	MoE	0.00	0.00
4	State Government	0.00	0.00
5	Industry Partners	4.80	0.00
6	IRG Internal Revenue Generation	0.00	0.00
7	Total (A)	4.80	0.00
8	B. Expenditure		
9	OH-35 Plan (Non-Recurring)	-	-
10	Building and other site development work	0.97	1.43
11	Computers/Equipment/Lab Equipment and Software etc.	2.77	0.80
12	Furniture and Fixtures etc.	0.40	0.20
13	Library books, E-journals, Newspapers and periodicals etc.	0.66	0.40
14	Total (B)	4.80	2.83

OH-31 Plan (Recurring)

Sr. No.	Head of Accounts	2022-23 (in Cr.)	2023-24 (in Cr.)
1	A. Receipts		
2	Grant-in-Aid OH-31 Plan (Recurring)	-	-
3	MoE	0.00	0.00
4	IRG Internal Revenue Generation	15.36	21.12
5	Total (A)	15.36	21.12
6	B. Expenditure		
7	OH-31 Plan (Recurring)	-	-
8	Salary and Allowances	5.76	6.97
9	Administrative and Others	3.37	3.28
10	Academic Expenditure	0.57	1.16
11	Total (B)	9.70	11.41



8. PEOPLE

8.1 ACADEMIC STAFF

Regular Faculty

Contractual Faculty

School of Computing

Sr. No.	Faculty Member
1	Prof. Manish Gaur
2	Dr. Ambigavathi M.
3	Dr. Ashwini Kumar Malviya
4	Dr. Mrityunjay Singh
5	Dr. Nishtha Hooda
6	Dr. Sanjit Ningthoujam
7	Dr. Shatrughan Modi
8	Dr. Shiv Dutt Sharma
9	Dr. Vikram Kumar

Sr. No.	Faculty Member
1	Mr. Divyansh Thakur
2	Ms. Hemlata
3	Dr. Laxmanika
4	Dr. Neha Sharma
5	Mrs. Nisha
6	Ms. Prachi Arora
7	Dr. Prince Sharma
8	Mr. Satish Kumar

School of Electronics

Sr. No.	Faculty Member
1	Dr. Ankur Kumar
2	Dr. Gurpreet Kaur
3	Dr. Naman Garg
4	Dr. Naveen Cheggoju
5	Dr. Shonal Chouksey
6	Dr. Tanu
7	Dr. Kishore Vejendla

Sr. No.	Faculty Member
1	Dr. Akhil Walia
2	Dr. Ankur Thakur
3	Dr. Nikunj Goyal
4	Ms. Pranshu Sharma
5	Mr. Satish Kumar

School of Basic Sciences

Sr. No.	Faculty Member
1	Dr. Bhavna
2	Dr. Ina Thakur
3	Dr. Jaspreet Kaur
4	Dr. Madan Lal Verma
5	Ms. Manu Chauhan
6	Dr. Payal Sharma
7	Dr. Satendra Kumar
8	Dr. Vandita Sharma

8.2 NON-ACADEMIC STAFF

Sr. No.	Name	Designation
1	Sh. Lagvish Malhotra	Registrar (i/c)

Contractual

Sr. No.	Name	Designation
1	Er. Ayush Sharma	AEE (Civil)
2	Dr. Gian Inder Jerath (Part-Time)	Medical Officer

Administrative Staff (Outsourced)

Sr. No.	Name	Role
1	Mr. Uttam Chand	Consultant (Audit)
2	Mr. R. K. Verma	Consultant (Finance)
3	Mr. Ankush Kapoor	Clerk
4	Mr. Ashwini Kumar	Clerk
5	Mr. Jagjeet Singh	Accountant
6	Ms. Kusum	Clerk
7	Ms. Shilpa	Clerk
8	Mr. Shubham Kashyap	Clerk
9	Ms. Sonu	Clerk
10	Mr. Subham Dhiman	Office Assistant
11	Mr. Rajesh Kumar	Admin Staff (Accounts)
12	Ms. Yashika	Admin Staff (Accounts)
13	Mr. Kamlesh Kumar	Admin Staff (Accounts)
14	Mr. Lakhvinder Singh	Admin Staff (Academic)
15	Mr. Sukh Sagar	Admin Staff (Academic)
16	Mr. Aman	Site Supervisor
17	Er. Rahul Rana	Engineering Assistant
18	Ms. Nidhi	Supervisor Horticulture
19	Ms. Shikha	Pharmacist Assistant
20	Er. Pankaj Kumar	Engineering Assistant
21	Er. Amit Sharma	Engineering Assistant
22	Mr. Sumit Kumar	Lab Technician
23	Mr. Vinay	Lab Technician
24	Mr. Rohit Sharma	Lab Technician
25	Mr. Deepak Kumar	Lab Technician

Administrative Staff (Outsourced)

Sr. No.	Name	Role
26	Mr. Satpal	Lab Technician
27	Mr. Raj Kumar	Lab Technician
28	Mr. Paramjeet Singh	Lab Technician
29	Mr. Avinash Dogra	Lab Technician
30	Mr. Ankush Thakur	Electrician
31	Mr. Suresh Dhiman	Electrician
32	Mr. Lakesh Kumar	Electrician
33	Mr. Prithvi Das	Electrician
34	Mr. Vishal	Electrician
35	Mr. Rajeev Kumar	Electrician
36	Mr. Gaurav Sharma	STP Operator
37	Mr. Pankaj Kumar	STP Operator
38	Mr. Neeraj Kumar	STP Operator
39	Mr. Mukesh Kumar	Plumber
40	Mr. Beli Ram	Hostel Attendant
41	Mr. Goldy	Hostel Attendant
42	Mr. Manoj Kumar	Hostel Attendant
43	Mr. Kumar Sunny	Hostel Attendant
44	Mr. Tarun Kumar	Hostel Assistant
45	Mr. Kuldeep Singh	Hostel Assistant
46	Mr. Jagjit Singh	Hostel Assistant
47	Mr. Ayush Thakur	Hostel Assistant
48	Mr. Hari Om	Hostel Assistant
49	Mr. Chetan	Hostel Assistant
50	Mr. Shivam Rai	Hostel Assistant
51	Mr. Sahil Dogra	Gym Trainer
52	Mr. Pradeep Kumar	MTS
53	Mr. Sanjeev Kumar	MTS
54	Mr. Kuldeep Singh	MTS
55	Mr. Rajeev Kumar	MTS
56	Mr. Amit Rana	Helper



FUTURE PLANS

9. FUTURE PLANS

Academics

UG Programs from AY 2024-25

1. **B.Tech. CSE (Data Science):** Focused on data analytics, machine learning, and big data technologies, this program prepares students for careers in the growing field of data science.
2. **B.Tech. CSE (Cyber Security):** This program emphasizes the principles and practices of protecting information systems, preparing students for roles in cybersecurity and digital forensics.

Certificate Programs from AY 2024-25

1. Six month course in AI/ML under continuing education initiative.
2. Advanced certificate programs in AI/ML/Cloud Computing/VLSI/Quantum Computing etc.

Centre of Excellence & Advanced Lab Establishments

1. Centre of Excellence in Cyber Security.
2. Centre of Excellence in AI and Cloud Computing.
3. High Performance Computing Lab.
4. Advanced VLSI and Nanotechnology Lab.
5. Advanced 5G/6G Communication Lab.

NEP2020 Initiatives

- Minor degree provisions in UG (from AY 2024-25)
- Credit transfer for NPTEL/SWAYAM courses (on going)
- Dedicated industry internship and credit transfer (on going)
- Academic bank of credit (in progress)
- Summer/Winter programs (on going)
- Focus of human values, ethics, and holistic development (from AY 2024-25)
- Joint Academic/PhD programs (future plan)
- Collaborative Academic/PhD programs (future plan)
- National/International Academic/Research/Industrial collaborations (on going)

Thrust Areas

- Semiconductor
- Cyber Security
- Blockchain
- Data Science
- Cloud Computing
- Innovation and Incubation centre
- Start-ups and entrepreneurship
- Quantum Computing

Infrastructure

Construction of new hostels (750 capacity), new academic block, and mini shopping complex.

Man Power

Recruitment of regular faculty members and non-teaching staff.

10. APPENDIX

Journal Publications

1. Munusamy, Ambigavathi, Mainak Adhikari, Mohammad Ayoub Khan, Varun G. Menon, Satish Narayana Srirama, Linss T. Alex, and Mohammad R. Khosravi. "Edge-centric secure service provisioning in IoT-enabled maritime transportation systems." *IEEE Transactions on Intelligent Transportation Systems* 24, no. 2 (2023): 2568-2577.
2. A. K. Malviya and N. Tiwari, "Quantum linear cryptanalysis on a toy cipher," *Pramana – Journal of Physics*, vol. 97, no. 2, Apr. 2023.
3. Jakhar, A. K., Singh, M., Sharma, R., Viriyasitavat, W., Dhiman, G., & Goel, S. (2024). A blockchain-based privacy-preserving and access-control framework for electronic health records management. *Multimedia Tools and Applications*, 1-35.
4. Singh, M., Pandey, S., Saxena, R., Chaudhary, M., & Lal, N. (2024). CQFaRAD: Collaborative Query-Answering Framework for a Research Article Dataspace. *International Journal of Information Technology*, 16(3), 1873-1886.
5. V. Kumar and R. Arablouei, 'Self-localization of IoT Devices with Imperfect Measurements via Approximate Maximum-Likelihood Estimation,' *Int. J. of Sensor Networks*, Accepted for publication.(Feb.'24).
6. Ankur Kumar, and Rajendra Kumar Nagaria. "Reduction of variation and leakage in wide fan-in OR Logic domino gate." *Integration* 89 (2023):229-240.
7. Cheggoju, Naveen, and Vishal Satpute. "BlinQS: Blind quality scalable image compression algorithm without using PCRD optimization." *Multimedia Tools and Applications* 83, no. 2 (2024): 5251-5275.
8. Gurpreet Kaur, "Neural Network (ConvNN & CapNN) based joint synchronization of timing and frequency for CO-OFDM system", *Optical and Quantum Electronics*, Springer, vol. 56, 923 2024. Doi.org/10.1007/s11082-024-06850-5.
9. Ankur Kumar, Naman Garg, Devrat Tyagi, RK Nagaria," Variations-tolerant low power wide fan-in OR logic domino circuit", *International Journal of Information Technology*, Springer 15 (3), 487-497, 2023. (Scopus).
10. Thakur, Divyansh, and Srikant Srinivasan. "AI-PUCMDL: artificial intelligence assisted plant counting through unmanned aerial vehicles in India's mountainous regions." *Environmental Monitoring and Assessment* 196, no. 4 (2024): 406.
11. Thakur, Divyansh. "Data transmission utilizing light fidelity for integration into IoT systems." *IETE Journal of Research*(2023): 1-9.
12. Thakur, Divyansh, Jaspal Kaur Saini, and Srikant Srinivasan. "DeepThink IoT: the strength of deep learning in internet of things." *Artificial Intelligence Review* 56, no. 12 (2023): 14663-14730.
13. Singh, Laxmanika, Pradeep Kumar Singh, and Jagpreet Sidhu. "Robust and secure watermarking method through BEMD, SVD and Arnold transform in wavelet domain." *International Journal of System Assurance Engineering and Management* 15, no. 4 (2024): 1361-1373.
14. Nisha, and Urvashi. "A systematic literature review of Internet of Video Things: Trends, techniques, datasets, and framework." *Internet Things* 24 (2023): 100906.
15. Indu Sharma*, Jaspreet Kaur*, Gargi Poonia, S.K. Mehta and Ramesh Kataria. Nanoscale designing of Metal Organic framework moieties as efficient too for environmental decontamination, *Nanoscale Advances*, 2023, 5, 3782-3802.
16. Richa, N. Kushwaha, E. Jaiswal, A. Kumar, Jaspreet Kaur, S. Sharma, A. Jian, J. Sindhu, S. K. Mehta, V. Saini and Ramesh Kataria. Mixed Ligand approach for novel hydrazide copper (II) complexes: Structural aspects, theoretical investigation and their biological evaluation, *Applied Organometallic Chemistry*, 2023, 5, 3782-3802.
17. Sharma, A. Kumar, Jaspreet Kaur, S. Mehra, A. Kumar, S. K. Sharma, S.K.Mehta, R. Kataria. Cobalt-based coordination polymer imitating nanozymatic Peroxido-Reductase activity for specific and sensitive detection of Fe(II) ions, *Inorganic Chemistry Communications*, 2023, 159, 111784.
18. Jaspreet Kaur, Khushveer Kaur, Khushwinder Kaur, Avtar S. Matharu and S.K. Mehta. Greener aspects of nanoparticle synthesis for water remediation: Challenges and future perspective, *Advances in Environmental and Engineering Research*, 2023, 4(2), 27.
19. Verma, P., Sharma, V., Chen C.Y., and Mishra, M., Damköhler number independent stable regime in reactive radial viscous fingering, *accepted*, 2024, *Journal of Fluid Mechanics*.
20. Sharma, V., Chen C.Y., and Mishra, M., A Linear Stability Analysis of Instabilities with Reactive Flows in Porous Medium, *Physics of Fluids*, 2023, 35 (6): 064105 (Impact factor: 4.6).
21. Verma, P., Sharma, V., and Mishra, M., Understanding stable/unstable miscible A+B→C reaction front and mixing in porous medium, *Physics of Fluids*, 2023, 35 (4): 044102 (Impact factor: 4.6).
22. Chandel, Heena, Prateek Kumar, Anuj K. Chandel, and Madan L. L. Verma. 2024. "Biotechnological Advances in Biomass Pretreatment for Bio-renewable Production Through Nanotechnological Intervention." *Biomass Conversion and Biorefinery* 14 (3): 2959–81.
23. Verma, Madan L., B. S. Dhanya, Bo Wang, Meenu Thakur, Varsha Rani, and Rekha Kushwaha. 2023. "Bio-Nanoparticles Mediated Transesterification of Algal Biomass for Biodiesel Production." *Sustainability* 16 (1): 295.
24. Verma, Madan L., Paul J. Joseph, and Didem Sen Karaman. 2023. "Editorial: Microbial Nanotechnology: A New Frontier in Microbiology." *Frontiers in Microbiology* 14 (October).

10. APPENDIX

Conference Publications

1. Izzul Fahmi Bin Shaharuddin, Vikram Kumar, et. all, 'Augmented Reality Application for Lab Instruments,' in IEEE 9th International Conference on SmartInstrumentation, Measurement and Applications (ICSIMA), pp-320-324, 2023.
2. Jugal Kishore Bhandari, Yogesh Kumar Verma, Varun Mishra, Ankur Kumar, and Santosh Kumar Gupta. "A PRBS Generator and Checker based BIST for Multipliers." In 2023 International Conference on Innovative Data Communication Technologies and Application (ICIDCA), pp. 1-5. IEEE, 2023.
3. Naman Garg, Ankur Kumar, and Harish Parthasarathy. "Simulation of Quant filter for estimating the spin of an electron." In 2023 Third International Conferen on Secure Cyber Computing and Communication (ICSCCC), pp. 332-336. IEE2023.
4. R. Gera, K. R. Ambati, P. Chakole, N. Cheggoju, V. Kamble and V. R. Satpute, "Classifying Human Activities using CNN and ConvLSTM in Video Sequences," 2023 2nd International Conference on Paradigm Shifts in Communications Embedded Systems, Machine Learning and Signal Processing (PCEMS), Nagpur, India, 2023, pp. 1-6, doi: 10.1109/PCEMS58491.2023.10136043.
5. M. Korumilli, K. S. Lasya, N. Cheggoju, V. Kamble and V. R. Satpute, "Human Fall Detection using Skeleton Features," 2023 2nd International Conference on Paradigm Shifts in Communications Embedded Systems, Machine Learning and Signal Processing (PCEMS), Nagpur, India, 2023, pp. 1-6, doi: 10.1109/PCEMS58491.2023.10136111.
6. K. V. Kumar, K. A. Teja, R. T. Bhargav, V. Satpute, C. Naveen and V. Kamble, "One-Shot Face Recognition," 2023 2nd International Conference on Paradigm Shifts in Communications Embedded Systems, Machine Learning and Signal Processing (PCEMS), Nagpur, India, 2023, pp. 1-6, doi: 10.1109/PCEMS58491.2023.10136112.
7. Gurpreet Kaur and Gurmeet Kaur, "CO-OFDM system with Self-Organizing Map (SOM) for improving the spectral efficiency by the compensation of Phase Noise", Innovations in VLSI, Signal Processing and Computational Technologies/ WREC'23, NIT Jalandhar, India, 2023.
8. Naman Garg, Ankur Kumar, Harish Parthasarathy, "Simulation of Quantum filter for estimating the spin of an electron", 2nd IEEE International Conference on Secure Cyber Computing and Communication (ICSCCC), pp. 332-336, 2023.
9. Thakur, Divyansh, Jaspal Kaur Saini, and Srikant Srinivasan. "Fine-tuned single shot detector for finding disease patches in leaves." In *International conference on agriculture-centric computation*, pp. 1-14. Cham: Springer Nature Switzerland, 2023.
10. Bhumbla, Simranjit, D. K. Gupta, and Nisha. "A Review: Object Detection Algorithms." In *2023 Third International Conference on Secure Cyber Computing and Communication (ICSCCC)*, pp. 827-832. IEEE, 2023.
11. Presented a paper in a two-day "International conference on catalysis for clean energy technologies and sustainable development" held in Chandigarh on April 5-6, 2024.
12. Singh, M., Jakhar, A. K., Juneja, A., & Pandey, S. (2023, May). Machine Learning Based Framework for Cryptocurrency Price Prediction. In *2023 Third International Conference on Secure Cyber Computing and Communication (ICSCCC)* (pp. 31-36). IEEE.
13. Verma, Madan L., Prateek Kumar, and Heena Chandel. 2023. "Nanobiotechnological Routes in Lignocellulosic Waste Pre-treatment for Bio-renewables Production." In *Springer Proceedings in Energy*, 23–34.

Books/Book Chapters

1. Ankur Kumar, Sajal Agarwal, Vikrant Varshnay, Varun Mishra, YogeshKum Verma, and Suman Lata Tripathi, eds. *Opto-VLSI Devices and Circuits Biomedical and Healthcare Applications*. CRC Press, 2023.
2. Thakur, Divyansh, and Jaspal Kaur Saini. "The significance of IoT and deep learning in activity recognition." In *IoT, Big Data and AI for Improving Quality of Everyday Life: Present and Future Challenges: IOT, Data Science and Artificial Intelligence Technologies*, pp. 311-329. Cham: Springer International Publishing, 2023.
3. Ankur Kumar, Sajal Agarwal, Vikrant Varshnay, Varun Mishra, Yogesh KumVerma, and Suman Lata Tripathi, eds. *Opto-VLSI Devices and Circuits Biomedical and Healthcare Applications*. CRC Press, 2023.
4. Kushwaha, Rekha, Santosh Kumar, Anamika Das, None Sukriti, and Madan L. Verma. 2023. "Silver Nanoparticle-based Nanocomposite Hydrogels for Biomedical Applications." In *Elsevier eBooks*, 241–65.
5. Kushwaha, Rekha, Santosh Kumar, and Madan L. Verma. 2023. "A Way From Biofuels to Biorefinery: Nanotechnological Perspectives." In *Elsevier eBooks*, 163–203.
6. Chetal, Gaurav, and Madan L. Verma. 2023. "In Silico Approaches for the Quest of the Novel Enzymes." In *Elsevier eBooks*, 65–78.
7. Rani, Varsha, and Madan L. Verma. 2023. "Current Advancement in Disposable Sensors for Industrial Applications." In *ACS Symposium Series*, 39–59.
8. Chandel, Heena, Bo Wang, and Madan L. Verma. 2023. "Nanomaterial-Based Fluorescent Biosensors for Monitoring Environmental Pollutants." In *Elsevier eBooks*, 742–54.

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