INDIAN INSTITUTE OF INFORMATION TECHNOLOGY UNA HIMACHAL PRADESH
(An Institute of National Importance under MoE)
Saloh, Una-177209
Website: www.iiitu.ac.in

RESEARCH & CONSULTANCY

A. Thrust Areas of Each School:

i) School of Computing

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	Vikram Kumar	Generative AI, Large Language Models, WSN
4	Nishtha Hooda	Big Data Analytics and Healthcare
5	Divyansh Thakur	Embedded Artificial Intelligence, Deep Neural Networks, IoT
6	Prachi Arora	Microbiology & Computer Vision
7	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	Satish Kumar	Operating Systems
13	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	Neha Sharma	Deep learning applications
17	Dr. Prince Sharma	Computer Networks and Social Network Analysis

ii) School of Electronics

S.No.	Name of the Faculty	Research Area/Specialization
1	Shonal Chouksey	Microelectronics and VLSI, Semiconductor Device Technology
2	Dr. Satendra Kumar	High Energy Physics, Collider Physics
3	Ankur Kumar	Low Power VLSI Circuits and Semiconductor Devices
4	Dr. Gurpreet Kaur	Communication Systems
5	Dr. Naman Garg	Signal Processing, Quantum Computing
6	Dr. Naveen Cheggoju	Computer Vision, Multimedia Computing, Next Generation Image Compression, Machine Learning
7	Dr. Madan Verma	Nanobiotechnology, Bioinformatics
8	Satish Kumar	VLSI Design
9	Dr. Ankur Thakur	Wireless Communication and Signal Processing
10	Dr. Nikunj Goyal	RF and Microwave Engineering

11	Dr. Payal Sharma	Higher Education, Faculty Development, Training and Development
12	Dr. Vandita Sharma	Scientific Computing, Partial differential Equations
13	Pranshu Sharma	VLSI, Signal Processing and Machine Learning
14	Dr. Vejandla Kishore	Wireless Communications, 6G

B. Publications:

Description		2022-23	2023-24
Total Journal Publications		32	25
Conference Publication	International	14	17
	National	3	0
Any important remarks or achievements of faculty/students in this regard		Dr. Madan Verma was listed in the year 2022 ranking for the World's Top 2% Scientist category published in October 2023 by Stanford University USA.	

C. Funded Projects

Description	2022-23	2023-24
No. of Funded Project	01	01
Total Value	Rs.6,30,000/-	Rs. 83,68,000/-

1. **Stri-Sakhi:** An Intelligent Medical Assistant for Women.

   PI: Dr. Nishtha Hooda
   Co-PI1: Dr. Vikram Kumar
   Objective: 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.

2. **CBDE-MoE:**
   PI: Dr. Tanu Wadhera
   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.

D. Event Organised

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 on Integrated Circuits, Communication, and Computing Systems (ICIC3S-2024)
6. e-STC on Python Programming for Image Processing from 24-28, June 2024.
7. Workshop: Internet of Things and Artificial Intelligence: Emerging Trends, Tools and Techniques" from 22-26 April 2024.
8. Hands-on Workshop on VLSI Circuits and Systems using Xilinx and Cadence Tools during 16-22, March 2024.

E. Patent 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)

FIC (R&C)

SIGNATURE