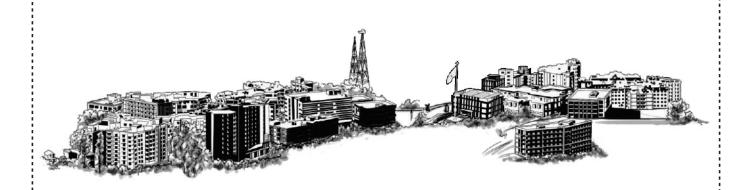
# Annual Report 2022-23













DIT University

Mussoorie Diversion Road, Makkawala Green Dehradun,

Uttarakhand, India, www.dituniversity.edu.in

## **Kulgeet**

हिम शिखरों के मध्य बसा छोटा सा कुल है अपना प्रकृति के पावन आँचल में अंगड़ाई लेता इक सपना जहाँ ज्ञान वृक्ष की छाया में होता अंतर्ज्ञान है उस पुण्यभूमि का नाम डी आई टी संस्थान है

सरस्वती माँ का वंदन जहाँ नित होता आया है जिसके छात्रों ने समाजहित हेतु संकल्प उठाया है देश हित कुछ करने का सपना भरता जहाँ उड़ान है उस कर्मभूमि का नाम डी आई टी संस्थान है

गुरु शिष्य की परम्परा को जहाँ निभाया जाता है हर जातिधर्म के भेदभाव को जहाँ भुलाया जाता है जिस कुल के प्रत्येक निवासी को मिलता उचित सम्मान है उस धर्मभूमि का नाम डी आई टी संस्थान है

वसुधैव कुटुंबकम का मूल मंत्र जहाँ सिखाया जाता है कर्तव्यों और मानव मूल्यों का पाठ पढ़ाया जाता है सर्वे भवन्तु सुखिनः जहाँ होता गुंजायमान है उस ज्ञानभूमि का नाम डी आई टी संस्थान है

विश्व स्तर पर उच्च शिक्षा का परचम लहराएँगे
अनुसंधानों के बल पर स्वर्णिम भविष्य ले आएँगे
जो वैश्विक स्तर पर श्रेष्ठ गुणवत्ता का देता सदा प्रमाण है
उस अध्ययनभूमि का नाम डी आई टी संस्थान है

#### Message from the Chairman



DIT University is distinguished by its capacity for evolution and change. In the world of uncertainties, DITU has survived as an example of resilience. Obstacles in our way have always served as a catalyst for innovation and transformation. The ability to adapt to new teaching and learning strategies has been exhibited by our teachers, and students in an impressive manner. In addition to preserving the principles of a student-centered education, DIT University has made it possible to innovate the curriculum and pursue fresh lines of inquiry in both study and research.

Owing to these characteristics, the university received "A" grade from the National Assessment and Accreditation Council of the country in May 2023. First batch of Nursing also started in July 2023. These accomplishments have served as a fitting capstone to the University's silver jubilee year. I firmly believe that our success is directly attributable to the commitment of our employees. We have made significant progress this year, and I want to personally congratulate every employee for their zeal, commitment, and persistence in advancing our university.

A high level of education, in our opinion, is the cornerstone of a country's progress. The provision of the best academic preparation to each of our students serves as our guiding concept, and we see it as our essential responsibility. Success in any field a student chooses will always depend on their ability to persevere and maintain self-control. With this in mind, we provide our students with a platform to flourish outside of the classroom by catering to their complete personality development through yearly events and activities like Youthopia. Our university has constantly defended quality and excellence, and by defending empowering ideals, we have inspired academics, staff, and students to embrace the role of responsible citizens.

In the University's ongoing quest for excellence, the faculty always take the lead. I would like to express my gratitude to all the DITU community members and express my belief that this report of events showcasing the noteworthy accomplishments of the academic year 2022–23 would be inspiring for all.

Jai Hind! Shri Anuj Aggarwal

## **Message from the Chancellor**



I extend my warm greetings to every one of you on the occasion of the Silver Jubilee Year of DIT University. It is a matter of satisfaction that the Institution has been categorized in the 'A' grade by NAAC. Students, Faculty, Staff, Parents and Alumni can be justifiably proud of their contribution to the growth of this Institution. The vision of the Founder stands as a beacon light for all of us.

DIT University has earned laurels as a good Teaching Institution. We now need to move up the ladder on Research output.

Furthermore, education has to be broad-based in line with NEP 2020.

I wish the Institution all the very best for the future.

Jai Hind! Shri N. Ravi Shanker

### Message from the Vice Chancellor



The Annual Report 2023 outlines our achievements and progress during the last one year. This year is special in the journey of DIT as we celebrate 25 years of our successful operations. From the humble beginnings as a college in 1998, we have now grown into a multi-disciplinary University. In the last few years, we have made significant progress in several areas. This year is also special for us as we attained the NAAC accreditation this year, with 'A' grade.

The University offers Undergraduate, Postgraduate and Doctoral (Ph.D.) programmes in various branches of Engineering, Technology, Physical Sciences, Liberal Arts, Pharmacy, Architecture and Management. I am pleased to notify that DITU has completed all infrastructure and faculty requirements for first session of College of Nursing & Health Professions in the next academic year and

also for a new Center of Excellence on Drone Technology. In our Sixth Convocation held on 15th October 2022, a total of 1238 degrees were conferred on successful students who passed out in the academic year, including 13 Ph.D. degrees. I am pleased to note that the 18000+ strong DIT alumni community is vibrant and has made distinct mark in different domains.

We are proud of our vibrant and disciplined student community. Apart from academics, they take active part in cultural and sports activities throughout the year. Through the activities of NCC, NSS and through several clubs and associations, students interact with the society around us to understand their challenges and also help them in ways possible through activities such as health camps, swatch abhiyan, tree plantation, teaching school children, work in old age homes etc.

The university has highly qualified and committed faculty in their respective fields of expertise. They ensure that the teaching and learning environment is constantly reviewed and upgraded. DIT's efforts to enhance its Research performance has started yielding good results during the last 4 to 5 years. The University endeavours continually to create and enhance an ambience suitable for fostering research and development activities. Organizing national and international conferences, seminars and workshops is a regular activity of the university. The dedicated and qualified non-teaching staff provide the required support in every of our activities.

Apart from equipping the students with technical and professional knowledge, DITU provides an environment that encourages research, innovation and Entrepreneurship among its students and faculty. This Annual Report documents our achievements and the untiring efforts put in by every one of us in further raising the standards of DIT University.

I congratulate all our faculty, staff and students for their untiring efforts towards achieving excellence. I thank our Honourable Chairman Shri Anuj Aggarwal, Honourable Chancellor Shri Ravi Shankar and member of Board of Governors and Board of management for their constant support and guidance.

Jai Hind! Prof. G. Raghurama

#### **PREFACE**

Team members of annual report are elated to share the University's Annual Report for the academic year 2022–2023. This report is presenting the result of dedication and sincere hard work of our students, faculty, administrative staff, and management who worked arduously to make the academic year 2022–23 a year of noteworthy accomplishments and victories.

The National Accreditation and Assessment Council awarded the University with "A" grade this year, which is a testimonial to the unshakable commitment of our entire community and is the most remarkable news of the year. National employability award for 2023, conferred to DITU during 2022-23. ISO 21001-2018 certification renewed during 2022-23 with a validity period from 23-01-2023 to 11-02-2026 (3 years). According to Career 360, DIT University is among India's top private engineering colleges with an AAA+ rating. The DIT School of Architecture, Planning and Design is the top-ranked private architecture institute in Uttarakhand and is ranked 19th among all architecture colleges in India.

We are proud to announce that some of our students have reached new career milestones. DITU alumni Ms. Yashika Mittal joined Microsoft as Software Engineer, Washington, USA. and Ms. Akanksha qualified UPPCS with Fourth rank. Amulya Vinayak and Deepak Bajetha, students from BTCSE joined prestigious organisations with offers of up to 58 LPA. Top five recruiters of this academic year are Cipla, Oracle, Deloitte, Intas Pharmaceuticals, and Paloalto.

In fifth convocation ceremony, university pleased to present 1238 degrees to under graduates, postgraduates & PhD degree. These degrees are a testament to DITU students' academic success as well as their commitment and consistent support from our teachers and staff to students. With the arrival of the first batch of B.Sc. nursing & B.Sc. of Physiotherapy students DITU campus has been expanded the range of academic programmes. This expansion strengthens DITU dedication for addressing society's changing needs and fostering a positive learning environment for all the students.

DITU faculty members and research scholars have published more than 250 research papers this year in SCI/Scopus/Web of Science. Additionally, The University has published more than 50 patents. DIT University is committed to fostering an environment that is welcoming diverse and creative individuals enable them to reach their full potential.

It is a matter of great pleasure to present the Annual Report of the University for the session 2019–20. Committee members who worked upon for preparation of the present Annual report include the following:

I extend my gratitude to the Chairperson and members of statutory bodies of the University for their unconditional support and guidance. I wish to express my special thanks to all the team members of Annual Report 2022–23, Dr. Garima Verma [Associate Professor, School of Computing], Dr. Manmohan Singhal [Associate Professor, SoPPHI], Dr. Subodh Kumar Jyoti [Assistant Professor, ME (SoET)], Dr. Saurabh Awasthi [Assistant Professor, EECE (SoET)], Dr. Vishakha Kaushik [Assistant Professor, Physics, (SoPS)], Ar. Purnima Verma [Assistant Professor, SoAP], Dr. Jaya Upadhyay [Assistant Professor, Humanities & Liberal Arts (SoAPD)], for bringing out this issue. We are thankful to all the concerned members of faculty & Staff for their support and cooperation for bringing out this issue of the Annual report.

Dr. Rama Sushil Professor. School of Computing Chairperson, DITU Annual Report 2022–23

#### Some Key Highlights of the Academic Year 2022-23

- 1. DIT University Accredited by NAAC with "A" Grade with 3.19 CGPA on the Scale of 4.
- 2. DIT university Rated AAA+ Among India's best private engineering college by Career 360.
- 3. DIT University Awarded National Employability Award 2023 for the Second Consecutive year.
- 4. DIT University School of Architecture, planning and Design ranked as number one Private Best Architecture institute in Uttrakhand & ranked 19th among best Architecture College in PAN India.
- 5. DIT University ranked 1st among top private Architecture college in Uttarakhand and ranked 12th PAN India by outlook India's top college rankings 2023.
- 6. PUBLICATIONS (In Journals) 250
- 7. PUBLICATIONS (In Conference Proceedings)- 69
- 8. BOOKS PUBLISHED 12.
- PUBLICATION OF BOOKS CHAPTERS –30
- 10. PATENTS (PUBLISHED) -75
- 11. PATENTS (GRANTED) -06
- 12. RESEARCH PROJECTS (COMPLETED/ONGOING) 16 with grant of Rs. 11,916,000
- 13. RESEARCH PROJECTS (SUBMITTED) -17 for grant of Rs. 36,820,229
- 14. 30 Conference/Seminar/Workshop/FDP Organized by DITU.
- 15. Faculty members recognized/awarded by various National/International research/academic bodies.
- 16. DITU Central Library Users can access to the all subscribed electronic resources of University Library has been set up through Knimbus platform which enables the users to access the content from anywhere and from any device.
- 17. Top five recruiters of this academic year- Mugugappa, Secure meters, Cipla, Oracle, Deloitte, Intas Pharmaceuticals, and Paloalto.
- 18. DITU alumni Ms. Yashika Mittal joined Microsoft as Software Engineer, Washington, USA.
- 19. DITU Alumni Ms. Akanksha qualifies UPPCS with Rank 4.

#### **INTRODUCTION**

One of the Top engineering college named "Dehradun Institute of Technology" established in 1998, achieved the status of University duly approved by Govt. of Uttarakhand vide Act No.10 of 2013 dated 15th February 2013. It is recognized by UGC under Section 2(f) of the UGC Act, 1956. DIT University is dedicated for providing quality education to enable the students to stand on their own feet. To ensure students' all-round growth, DITU place a strong emphasis on technical trainings, soft skills, and entrepreneurship and start-up trainings with the encouragement to self-learning. University encourages young minds to dream, develop, and explore new possibilities.

#### Vision

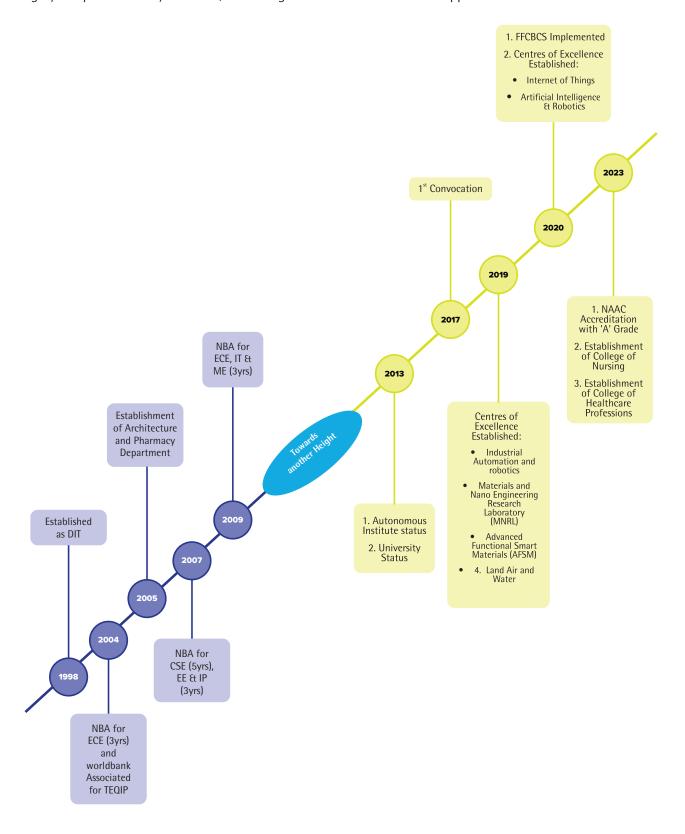
- To be a world class professional University, constantly striving for excellence in education by high quality teaching in synchronization with the industry needs.
- To be driven by the spirit of ground breaking research and entrepreneurship.
- To instill each student qualities of mind and character necessary for good citizenship and wise leadership.

#### Mission

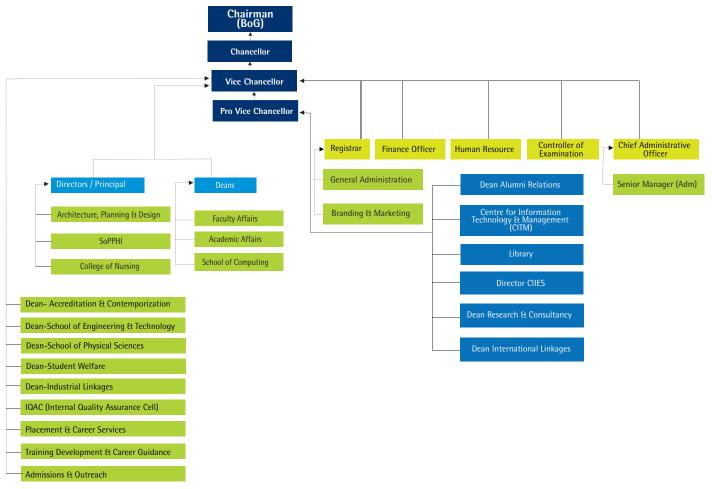
- To put our students first and work responsibly with honesty, transparency and integrity to influence, inspire and nurture talent for our students, and the members of faculty and staff.
- To encourage creative ability and research temperament.
- To provide knowledge based technological services for industry and society.
- To synergize the teaching learning process through active interaction with industry and academia whilst embracing modern technological changes.

Our holistic, interdisciplinary approach towards teaching and research, while maintaining global standards of academic excellence at DIT University are an asset to help students gain a world-class degree built around students' interests and goals.

Many significant milestones have been achieved over the last 23 years DITU has approximately 21,500 alumni working at higher position in various professions as well as serving society all across the world. More than 270 highly competent faculty members, mentoring the students with a holistic approach.



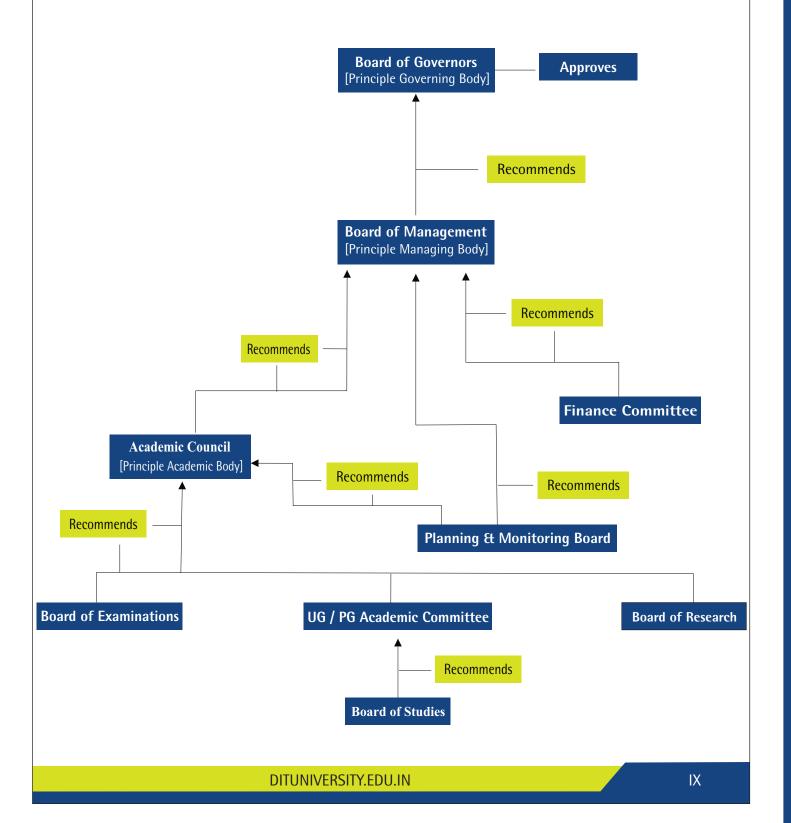
## **Organization Structure - DIT University**



Note: HoDs of Academic Departments report to the respective Dean/Director

### STATUTORY BODIES

## Statutory Bodies of DIT University [Recommending & Approving Authorities]



## The Visitor

#### Lieutenant General Gurmit Singh Hon. Governor of Uttarakhand

BOARD OF GOVERNORS						
S. NO	NAME	DESIGNATION & POSTAL ADDRESS	PROFESSION	POSITION	ı	TENURI ROM TO
1	Mr. Anuj Aggarwal (Chairman)	Chairman, DIT University, Mussoorie Diversion Road, Dehradun 248009, - Ph: 0135-714304, Mob: 09837048624, Email: chairman@dituniversity.edu.in	Educationist	Chairman nominated from amongst the members of promoting society	Ex – Offi	cio
2	Mr. Amit Agarwal (Co-Chairman)	Member Secretary, Unison Education Foundation, Third Floor, Administrative Block, IMS Unison University, Mussoorie Diversion Road, Dehradun 248009, Mob: 09837090000, Email: amit.agarwal@unisonindia.com	Educationist	Co- Chairman nominated from amongst the members of promoting society	Ex - Offi	cio
3	Mr. N. Ravi Shanker (Vice Chairman)	Chancellor, DIT University, Mussoorie Diversion Road, Dehradun 248009, Ph: 0135-7144388, Email: chancellor@dituniversity.edu.in	Academician	Vice Chairman (Ex-Officio Member)	Ex – Officio	
4	Prof. G. Raghurama (Member Secretary)	Vice Chancellor, DIT University, Mussoorie Diversion Road, Dehradun 248009, Ph: 0135-7144308, Mob: 07500586777, Email: vicechancellor@dituniversity.edu.in	Academician	Vice Chancellor (Member Secretary)	Ex-Offic	io
5	Principal Secretary, Higher Education Department, Govt. of Uttarakhand (Ex-Officio Member)	Principal Secretary, Higher Education Department, Govt. of Uttarakhand, Principal Secretary, Higher Education, Secretariat, Dehradun 248001, Ph: 0135- 2712055 (0) 2735006 (R) 2712014, Email: secy-hedu- ua@nic.in	IAS Officer	Principal Secretary (Ex-Officio Member)	Ex-Offic	io
6	Dr. Priyadarsan Patra (Member)	Pro Vice Chancellor, DIT University, Mussoorie Diversion Road, Dehradun 248009, Ph: 0135-714003, Mob: 9049010303, Email: pvc@dituniversity.edu.in Former	Academician	Member nominated by the Promoting Society	Oct 25, 2022	Oct 24, 2024
7	Dr. Chandra Shekhar (Member)	Director, CEERI (CSIR Lab), Pilani, Rajasthan Email: chandra.shekhar@pilani.bits- pilani.ac.in	Academician	Member nominated by the Chairman, Promoting Society from reputed higher education institutions	Dec 01, 2022	Nov. 30, 2024
8	Dr. S P Gupta (Member)	Vice Chancellor, University of Engineering & Technology, Roorkee, Mob: +91-9837074284, Email: spgfee@gmail.com	Academician	Member re- nominated by the Promoting Society	Oct. 06, 2022	Oct. 05, 2024

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9	Dr. Ratna Prakash (Member)	Professor & Principal, Pal College of Nursing & Medical Sciences, Haldwani	Academician	Member nominated by the Promoting Society	June 03, 2023	June 02, 2025
10	Mr. Rajeev Gupta (Member)	President, IMS NOIDA, Institute of Management Studies, A-8B, Sector- 62, Noida, U.P., Ph: 0120-4798800, Email: rajeevkrgupta29@gmail.com, president@imsnoida.com	Educationist	Member re-nominated by the Promoting Society	June 03, 2023	June 02, 2025
11	Dr. L.K. Maheshwari (Member)	Advisor to Chancellor & Former Vice Chancellor BITS Pilani - 335/512 Chandradham, Motinagar, Tricona Park, Lucknow 226004, Ph: 0522-2693822, Mob: 09695257152, Email: Imaheshwari@gmail.com	Academician	Member re-nominated by the Chairman, Promoting Society from reputed higher education institutions	June 03, 2023	June 02, 2025
12	Dr. Sandeep Sancheti (Member)	Provost (Vice Chancellor), Marwadi University, Rajkot, Gujarat, Mob: 8003599901 Email: sandeepsancheti@gmail.com	Academician	Member re-nominated by the Chairman, Promoting Society from reputed higher education institutions	Dec. 01, 2022	Nov. 30, 2024
13	Mr. Anupam Saronwala (Member)	Advisor, Mentor & Angel Investor (Former Program Director, IBM Research) 58, Navjivan Vihar, New Delhi-110017, Mobile No.: +91- 9810010644, Email: asaronwala@gmail.com, anupam@iiitd.ac.in	Corporate Professional	Member nominated by the Chairman, Promoting Society from reputed industrial /corporate sector/reputed practicing professionals	June 03, 2023	June 02, 2025
14	Dr. Debashis Dutta (Member)	Executive Vice President   Strategic Initiative, Reliance Corporate Park, Navi Mumbai – 400701, Mobile No.: +91-9372763690, Email: debashis.dutta@ril.com	Corporate Professional	Member nominated by the Chairman, Promoting Society from reputed industrial /corporate sector/ reputed practicing professionals	June 03, 2023	June 02, 2025
15	Dr. Aditya Narain Purohit (Member)	Ex-Vice Chancellor, HNBGU, Srinagar, "Almi Anchal", 181/1 Dobhalwala, Dehradun 248006, Uttarakhand; Tel: Res. (0135) 2713219; Mob: 09412058572; Email: adityapurohit19@gmail.com	Academician	Academicians nominated by the Visitor	Nov. 14, 2021	Nov. 13, 2023
16	Maj. General Jitendra Singh Yadav (Retd.) (Member)	Flat 1-A-502, AWHO Colony, Gurjindar Vihar, Pocket 5, Sector Chi I, Greater Noida-201301, Mobile: 07838677349 Email: jsyadav81@yahoo.com	Academician	Academicians nominated by the Visitor	Nov. 14, 2021	Nov. 13, 2023

17	Dr. Samuel Ernest (Invitee)	Registrar, DIT University, Mussoorie Diversion Road, Dehradun 248009, Ph: 0135-7144312, Mob: 9910668999, Email: registrar@dituniversity.edu.in	Administration	Invitee	-	-
18	Dr. R C Goel (Special Invitee)	Advisor General to the Chairman BoG, DIT University, Mussoorie Diversion Road, Dehradun 248009, Mob: 8057226699 Email: rcgoel1@yahoo.co.in	Academician	Special Invitee	-	-

BOARD OF	BOARD OF MANAGEMENT				
Prof. G. Raghurama (Chairman) Vice Chancellor, DIT University Academician Ex-Officio	Principal Secretary, Higher Education, Govt. of Uttarakhand IAS Officer Ex-Officio				
Prof. Priyadarsan Patra Pro Vice-Chancellor, DIT University Academician Ex-Officio	Dr. S.S. Mantha Former Chairman, AICTE Adj Prof. NIAS Bangalore, Emeritus Academician Nominated by the Chancellor				
Prof. Manjula Sritharan Professor, University of Hyderabad Academician Member nominated by Unison Education Foundation	Dr. Prakash Chauhan Director, National Remote Sensing Centre, ISRO, Balanagar, Hyderabad Academician Member nominated by Unison Education Foundation				
Prof. Anjali Krishan Sharma Director, School of Architecture Planning and Design Academician Ex-Officio	Prof. B.K. Mishra Director, IIT Goa Academician Member nominated by Unison Education Foundation				
Dr. Debopam Acharya Dean, School of Computing Academician Ex-Officio	Dr. Prakash Tiwari Dean, A&C Professor, School of Liberal Arts & Management Academician Ex-Officio				
Dr. Naresh Mohan Chadha Dean, School of Physical Sciences Academician Ex-Officio	Mr. Mukesh Goyal Plant Head, Hero Motocorp Ltd, SIDCUL, Haridwar Corporate Professional Member nominated by Unison Education Foundation				
Dr. Havagiray Chitme Professor, School of Pharmaceutical & Populations Health Informatics Academician Ex-Officio	Dr. Samuel Ernest (Non member Secretary) Registrar, DIT University Administration Ex-Officio				

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Prof. Priyadarsan Patra Pro Vice-Chancellor, DIT University Academician Ex-Officio Dr. B K Singh Dean, FacultyAffairs Academician Ex-Officio	Dr. Hemraj Verma Dean, School of Liberal Arts & Management Academician Ex-Officio				
Dr. Debopam Acharya Dean, School of Computing & Dean R & C, Academician Ex-Officio	Dr. Satish Kumar Gupta Director, School of Pharmaceutical & Populations Health Informatics Academician Ex-Officio				
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Dr. Nafees Ahmad Head of the Department, School of Engineering & Technology [EECE] Academician Ex-Officio	Dr. Vijay Negi Head of the Department, School of Liberal Arts & Management Academician Ex-Officio				
Dr. Samuel Ernest (Non member Secretary) Registrar, DIT University Administration Ex-Officio	Dr. Vijay Kumar Jain Head of the Department, School of Liberal Arts & Management Academician Ex-Officio				
Dr. Naveen Singhal Dean, Alumni Relations Academician Ex-Officio	Dr. Havagiray Chitme Professor, School of Pharmaceutical & Populations Health Informatics Academician Ex-Officio				
Dr. Rakesh Mohan Dean, Student Welfare Academician Ex-Officio	Dr. Tarumay Ghoshal Professor, ME (School of Engineering & Technology) Academician Ex-Officio				

Dr. Ravi Kumar Shukla	Dr. Rajeev Garg
Professor, School of Physical Sciences	Professor, School of Architecture Planning and Design
Academician	Academician
Ex-Officio	Ex-Officio
Dr. Hemraj Saini Professor, School of Computing Academician Ex-Officio	Dr. Aanchal Sharma Associate Professor, School of Architecture Planning and Design Academician Ex-Officio
Dr. Nitin Kumar Gupta Head of the Department, ME, (School of Engineering & Technology) Academician Ex-Officio	Dr. Srabanti Maji Associate Professor, School of Computing Academician Ex-Officio
Dr. Manisha Duseja Head of the Department, School of Physical Sciences[Chemistry] Academician Ex-Officio	Dr. Anshuman Das Assistant Professor, School of Engineering & Technology Academician Ex-Officio
Dr. Manoj Kumar Professor, ME (School of Engineering & Technology) Academician Ex-Officio	Dr. A. Wali Managing Director, FITT- Convener, IIT-Delhi External Expert
Dr. Rama Sushil	Prof. Manoj Mishra
Professor, School of Computing	Professor, Department of CSE,
Academician	IIT Roorkee
Ex-Officio	External Expert
Dr. Manoj Bhatnagar	Dr. Manoranjan Parida
Professor, School of Physical Sciences	Professor, Department of CE
Academician	Indian Institute of Technology, Roorkee
Ex-Officio	External Expert
Dr. Surbhi Sachdev	Dr. Ashok Kumar
Professor, School of Physical Sciences	Associate Professor, School of Computing
Academician	Academician
Ex-Officio	Ex-Officio
Dr. Gagan Singh	Dr. Ashutosh Joshi
Professor, School of Engineering & Technology)	Professor, School of Architecture Planning and Design
Academician	Academician
Ex-Officio	Ex-Officio
Dr. Anil Kumar	Dr. Monika Srivastava
Professor, School of Computing	Professor, School of Liberal Arts & Management
Academician	Academician
Ex-Officio	Ex-Officio
Dr. Bharti Sharma	Dr. Parveen Kumar
Assistant Professor, School of Computing	Associate Professor, School of Physical Science
Academician	Academician
Ex-Officio	Ex-Officio

Dr. Dhruv Chaudhary Assistant Professor, School of Engineering & Technology Academician Ex-Officio	Prof. Dr. P S N Rao DIRECTOR (Equivalent to Vice Chancellor) School of Planning and Architecture(SPA), New Delhi External Expert
Dr. Ramesh Chandra Professor, Institute Instrumentation Centre, IIT-Roorkee External Expert	Mr. Sanjiv Sain (Non-member) Chief Librarian, DIT University Ex-Officio
Mr. Debashish Bhattacharya Deputy Director General, Broadband India Forum, New Delhi External Expert	Dr. Y K Tyagi (Non-member) Controller of Examination DIT University Ex-Officio
Dr. Satinder Paul Singh (Member) Professor, Mechanical Engineering, IIT-Delhi External Expert	

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S.No.	Name	Designation and Postal address	Profession	Position	Tenure From To
1.	Prof. G. Raghurama (Chairman)	Vice Chancellor, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Vice Chancellor	Ex-Officio
2.	Prof. Priyadarsan Patra (Member)	Pro Vice Chancellor, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Pro Vice Chancellor	Ex-Officio
3.	Dr. R. Babu (Member)	Principal, DIT College of Nursing, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: principal.nursing@dituniversity.edu.in	Academician	Director	Ex-Officio
4.	Prof. Anjali Krishan Sharma (Member)	Director, School of Architecture, Planning & Design and Dean International Linkages, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: director.arch@dituniversity.edu.in, dean.international@dituniversity.edu.in	Academician	Director	Ex-Officio
5.	Dr. Satish Kumar Gupta (Member)	Dean, School of Pharmaceutical & Populations Health Informatics, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: dean.sopphi@dituniversity.edu.in Dean,	Academician	Director	Ex-Officio
6.	Dr. B K Singh (Member)	Faculty Affairs & SoET, DIT University, Mussoorie Diversion Road, Dehradun 248009 deanfacultyaffairs@dituniversity.edu.in, dean.soet@dituniversity.edu.in	Academician	Dean	Ex-Officio
7.	Dr. Debopam Acharya (Member)	Dean, School of Computing, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: dean.computine:@dituniversitv.edu.in	Academician	Dean	Ex-Officio
8.	Dr. Hemraj Verma (Member)	Dean Academic Affairs and Professor, School of Liberal Arts & Management, DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009 Email: dean.academicaffairs@dituniversity.edu.in	Academician	Dean	Ex-Officio
9.	Dr. Naresh Mohan Chadha (Member)	Professor & HoD, School of Physical Sciences [Mathematics] and Dean Applied Sciences, DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun – 248009 Email: hod.math@dituniversity.edu.in	Academician	Dean & Head of the Department	Ex-Officio
10.	Dr. Naveen Singhal (Member)	Dean Alumni Relations and Professor, School of Physical Sciences [Chemistry], DIT University, Mussoorie Diversion Road, Dehradun 248009 dean.alumni.relations@dituniversitv.edu.in	Academician	Dean	Ex-Officio

11.	Dr. Rakesh Mohan (Member)	Dean Student Welfare and Professor, School of Physical Sciences [Mathematics], DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: dean.sw@dituniversity.edu.in	Academician	Dean	Ex-Officio
12.	Dr. Prakash Tiwari (Member)	Dean A&C and Professor, School of Liberal Arts & Management, DIT University, Village Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Dean	Ex-Officio
13.	Dr. Hemraj Saini (Member)	Professor, School of Computing & Dean R & C, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Dean	Ex-Officio
14.	Dr. Hiranrnoy Roy (Member)	Dean and Professor, Liberal Arts (School of Liberal Arts & Management), DIT University, Village Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Dean	Ex-Officio
15.	Dr. Praveen Kumar (Member)	Associate Professor & Associate Head CIIES, DIT University, DJT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Dean In- charge CIIES	Ex-Officio
16.	Dr. Tarumay Ghoshal (Member)	Associate Professor & HoD, CE (School of Engineering & Technology), DIT University, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
17.	Dr. Nafees Ahmad (Member)	Assistant Professor & HoD, EECE (School of Engineering & Technology), DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Head of the Department	Ex-Officio
18.	Dr. Manisha Duseja (Member)	Assistant Professor & HoD, School of Physical Sciences [Chemistry], DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
19.	Dr. Mandeep Kumar Arora (Member)	Associate Professor & HoD, School of Pharmaceutical & Populations Health Informatics, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
20.	Ar. Jitendra Kumar Sarohi (Member)	Associate Professor & HoD, School of Architecture & Design, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
21.	Dr. Ravi Kumar Shukla (Member)	Assistant Professor & HoD, Physics (School of Physical Sciences), DIT University, Village Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Head of the Department	Ex-Officio
22.	Dr. Nitin Kumar Gupta	Assistant Professor & HoD ME (School of Engineering & Technology), DIT University,	Academician	Head of the Department	Ex-Officio

23.	Dr. Gaurav Richhariya (Member)	Assistant Professor & HoD PE (School of Engineering & Technology), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-0	fficio
24.	Dr. Vijay Negi (Member)	Assistant Professor & HoD, Liberal Arts (School of Liberal Arts & Management), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-0	fficio
25.	Dr. Vijay Kumar Jain (Member)	Assistant Professor & HoD, Management Studies (School of Liberal Arts & Management), DIT University, Village – Makkawala, Mussoorie Diversion Road, Dehradun – 248009	Academician	Head of the Department	Ex-0	fficio
26.	Dr. Madhu Kumari (Member)	Professor, School of Computing, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Professor (re- nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
27.	Dr. Megha (Member)	Assistant Professor, School of Computing, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
28.	Dr. Ashutosh Joshi (Member)	Professor, School of Architecture, Planning & Design, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
29.	Dr. Bhavna (Member)	Assistant Professor, School of Pharmaceutical & Population Health Informatics, DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
30.	Dr. Subhojit Roy (Member)	Assistant Professor, Civil Engineering (SoET), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
31.	Dr. Sonam Mahajan Mishra (Member)	Assistant Professor, Physics (SoPS), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
32.	Dr. Anil Patil (Member)	Associate Professor, Mechanical Engineering (SoET), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Associate Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
33.	Dr. Kuldeep Choudhary (Member)	Assistant Professor, EECE (SoET), -DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
34.	Dr. Jabrinder Singh (Member)	Assistant Professor, Chemistry (SoPS), DIT University, Village -Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24

35.	Dr. Vinod Kumar Gupta (Member)	Assistant Professor, Mathematics (SoPS). DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
36.	Dr. Pankaj Kumar (Member)	Assistant Professor, Liberal Arts (SoLAM), DIT University, Village- Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
37.	Dr. Pranav Kumar (Member)	Assistant Professor, Humanities & Social Science (SoLAM), DIT University, Village Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Assistant Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24

	BOARD OF EXAMINATIONS							
S.No.	Name	Designation and Postal address	Profession	Position	Tenure			
1.	Prof. G. Raghurama (Chairman)	Vice Chancellor, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Vice Chancellor	Ex-Officio			
2.	Prof. Priyadarsan Patra (Member)	Pro Vice Chancellor, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Pro Vice Chancellor	Ex-Officio			
3.	Principal, DIT College of Nursing (Member)	Principal, DIT College of Nursing, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: principal.nursing@dituniversity.edu.in	Academician	Director	Ex-Officio			
4.	Prof. Anjali Krishan Sharma (Member)	Director, School of Architecture, Planning & Design and Dean International Linkages, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: director.arch@dituniversity.edu.in, dean.international@dituniversity.edu.in	Academician	Director	Ex-Officio			
5.	Dr. Satish Kumar Gupta (Member)	Dean, School of Pharmaceutical & Populations Health Informatics, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: dean.sopphi@dituniversity.edu.in	Academician	Director	Ex-Officio			
6.	Dr. B K Singh (Member)	Dean, Faculty Affairs & SoET, DIT University, Mussoorie Diversion Road, Dehradun 248009 deanfacultyaffairs@dituniversity.edu.in, dean.soet@dituniversity.edu.in	Academician	Dean	Ex-Officio			
7.	Dr. Debopam Acharya (Member)	Dean, School of Computing, DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: dean.computine:@dituniversitv.edu.in	Academician	Dean	Ex-Officio			
8.	Dr. Hemraj Verma (Member)	Dean Academic Affairs and Professor, School of Liberal Arts & Management, DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009 Email: dean.academicaffairs@dituniversity.edu.in	Academician	Dean	Ex-Officio			
9.	Dr. Naresh Mohan Chadha (Member)	Professor & HoD, School of Physical Sciences [Mathematics] and Dean Applied Sciences, DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009 Email: hod.math@dituniversity.edu.in	Academician	Dean & Head of the Department	Ex-Officio			

10.	Dr. Naveen Singhal (Member)	Dean Alumni Relations and Professor, School of Physical Sciences [Chemistry], DIT University, Mussoorie Diversion Road, Dehradun 248009 dean.alumni.relations@dituniversitv.edu.i n	Academician	Dean	Ex-Officio
11.	Dr. Rakesh Mohan (Member)	Dean Student Welfare and Professor, School of Physical Sciences [Mathematics], DIT University, Mussoorie Diversion Road, Dehradun 248009 Email: dean.sw@dituniversity.edu.in	Academician	Dean	Ex-Officio
12.	Dr. Prakash Tiwari (Member)	Dean A&C and Professor, School of Liberal Arts & Management, DIT University, Village Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Dean	Ex-Officio
13.	Dr. Hemraj Saini (Member)	Professor, School of Computing & Dean R & C, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
14.	Dr. Tarumay Ghoshal (Member)	Associate Professor & HoD, CE (School of Engineering & Technology), DIT University, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
15.	Dr. Nafees Ahmad (Member)	Assistant Professor & HoD, EECE (School of Engineering & Technology), DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Head of the Department	Ex-Officio
16.	Dr. Manisha Duseja (Member)	Assistant Professor & HoD, School of Physical Sciences [Chemistry], DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
17.	Dr. Mandeep Kumar Arora (Member)	Associate Professor & HoD, School of Pharmaceutical & Populations Health Informatics, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
18.	Ar. Jitendra Kumar Sarohi (Member)	Associate Professor & HoD, School of Architecture & Design, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio
19.	Dr. Ravi Kumar Shukla (Member)	Assistant Professor & HoD, Physics (School of Physical Sciences), DIT University, Village Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Head of the Department	Ex-Officio
20.	Dr. Nitin Kumar Gupta (Member)	Assistant Professor & HoD ME (School of Engineering & Technology), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Officio

21.	Dr. Gaurav Richhariya (Member)	Assistant Professor & HoD PE (School of Engineering & Technology), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Ex-O Department		icio
22.	Dr. Vijay Negi (Member)	Assistant Professor & HoD, Liberal Arts (School of Liberal Arts & Management), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Head of the Department	Ex-Off	icio
23.	Dr. Vijay Kumar Jain (Member)	Assistant Professor & HoD, Management Studies (School of Liberal Arts & Management), DIT University, Village – Makkawala, Mussoorie Diversion Road, Dehradun – 248009	Academician	Professor (re- nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
24.	Dr. Gagan Singh (Member)	Professor, EECE (SoET), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
25. Dr. Monika Srivastava (Member)		Professor, School of Liberal Arts & Management, DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Academician	Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
26.	Ar. Sandeep Saxena (Member)	Associate Professor, School of Architecture, Planning & Design, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Professor (Nominated by Vice Chancellor)	01- May- 23	30- Apr- 24
27.	Dr. Manmohan Singhal (Member)	Associate Professor, School of Pharmaceutical & Population Health Informatics, DIT University, Village - Makkawala, Mussoorie Diversion Road, Dehradun - 248009	Administration	Professor (Nominated by Vice Chancellor)	Ex-Off	icio
28.	Dr. Samuel Ernest (Member)	Registrar, DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	Registrar	Ex-Off	icio
29.	Dr. Y K Tyagi (Member Secretary)	COE & Professor, Mechanical Engineering (SoET), DIT University, Mussoorie Diversion Road, Dehradun 248009	Academician	COE	Ex-Off	icio

## **UNIVERSITY COMMITTEES**

S.No.	Committee	Chairperson
1.	Anti-Ragging Committee	Dr. Rakesh Mohan, Dean student welfare Chairperson Mob. 9897491211 Email: dean.sw@dituniversity.edu.in
2.	Hostel Discipline Committee	Dr. Rama Sushil Professor, School of Computing, Chairperson Mob. 7830736608 Email: rama.sushil@dituniversity.edu.in
3.	Proctorial Board	Dr. Naveen Singhal Professor, SoPS (Chemistry), Chief Proctor Mob. 9927100304 Email: chief.proctor@dituniversity.edu.in
4.	SC/ST Welfare Committee	Dr. Rakesh Kumar Saini, Assistant Professor, SoC, Chairperson Mob. 9456294074, Email: rk.saini@dituniversity.edu.in
5.	Social and Cultural Committee	Dr. Manisha Duseja, Assistant Professor, SoPS (Chemistry), Chairperson Mob. 9456540292, Email: manisha.duseja@dituniversity.edu.in
6.	Sports & Athletics Committee	Dr. Jabrinder Singh, Assistant Professor, SoPS (Chemistry), Chairperson Mob: 9812428464 Email: drjabrinder.singh@dituniversity.edu.in
7.	Student Grievance Committee	Dr. Rakesh Mohan, Dean Student Welfare, Chairperson Mob. 9897491211, Email: dean.sw@dituniversity.edu.in
8.	University Discipline Committee	Prof. Priyadarsan Patra, Pro Vice Chancellor, Chairperson Mob. 7055219111, Email: pvc@dituniversity.edu.in
9.	Internal Complaints Committee (ICC)	Prof. Surbhi Sachdev, Professor, Physics (SoPS), Presiding Officer Mob. 8791819695 Email: surbhi.sachdev@dituniversity.edu.in
10.	Students Consultative Committee	Dr. Rakesh Mohan, Dean Student Welfare Chairperson Mob. 9897491211 Email: dean.sw@dituniversity.edu.in
11.	Women Welfare Cell	Prof. Surbhi Sachdev, Professor, Physics (SoPS), Presiding Officer Mob. 8791819695 Email: surbhi.sachdev@dituniversity.edu.in

## **STATUTORY BODIES MEETINGS**

Boards / Committees	Meeting No.	Chaired By	Meeting Date
Board of Governors	16th Meeting	Sh. Anuj Aggarwal,	25.07.2022
	17th Meeting	Sh. N. Ravi Shanker	14.10.2022
Board of Management	14th Meeting	Prof. G. Raghurama	30.09.2022
board of Management	15th Meeting	Prof. G. Raghurama	23.12.2022
	20th Meeting	Prof. G. Raghurama	07.10.2022
Academic Council	21st Meeting	Prof. G. Raghurama	02.12.2022
	22nd Meeting	Prof. G. Raghurama	06.03.2023
Board of Research	16th Meeting	Prof. G. Raghurama	28.09.2022
board of Nescarcii	17th Meeting	Prof. G. Raghurama	02.06.2023
	23rd Meeting	Sh. N. Ravi Shanker	19.07.2022
Board of Examinations	24th Meeting	Sh. N. Ravi Shanker	27.02.2023
	25th Meeting	Sh. N. Ravi Shanker	30.06.2023

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## SCHOOL OF ARCHITECTURE, PLANNING & DESIGN List of Programmes

S. No.	Program offered	Year of Establishment
1.	B. Arch.	2005
2.	B. Des.(Interior Design)	2017
3.	B. Des. (User Experience)	2018
4.	B. Des. (Visual Graphics and Animation)	2021
5.	M. Des. (User Experience) in collaboration with IMAGINXP	2019
6.	M. Plan. (Urban and Regional Planning)	2021

## **List of Faculty Members**

S. No	Name of Faculty Member	Designation	Date of Joining	Specialization
1	Dr. Anjali Krishan Sharma	Professor & Director	15-Feb-22	Sustainability
2	Dr. Ashutosh Joshi	Professor	12-July-22	Urban Planning and Architectural Design
3	Ar. Jitendra Kumar Sarohi	Associate Professor	16-Nov-09	Building Services
4	Ar. Sandeep Saxena	Associate Professor	04-Aug-06	Architectural Design
5	Ar. Vartica Saxena	Associate Professor	04-Aug-06	Architectural Design
6	Dr. Aanchal Sharma	Associate Professor	16-Jul-18	Architectural Design
7	Ar. Abhilasha Pathak	Associate Professor	14-Jan-19	Ekistics
8	Prof. Rajiv Garg	Associate Professor	03-Feb-22	Architectural Design
9	Dr. Seema Praliya	Assistant Professor	05-Aug-19	Construction Management
10	Ar. Upendra Joshi	Assistant Professor	24-Aug-20	Interior Architecture
11	Ar. Purnima Verma	Assistant Professor	09-Jan-17	Climate Change and Sustainable Development
12	Dr. Akhilesh Kumar	Assistant Professor	20-Dec-21	Urban and Regional Planning
13	Ar. Vedangi Deshpande	Assistant Professor	24-Aug-20	Historic Urban Landscape, Heritage Conservation
14	Ar. Meghna Chatterji	Assistant Professor	07-Aug-19	Architectural Conservation
15	Ar. Meet Fatewar	Assistant Professor	02-Aug-21	Regional Planning
16	Ar. Manmeet Kaur	Assistant Professor	01-Sep-20	Landscape Architecture

17	Ar. Poonam Katre	Assistant Professor	22-Jul-19	Urban Design
18	Ar. Kunuku Tamogna	Assistant Professor	10-Feb-22	Urban Design
19	Ar. Rajarshi Roy Ar.	Assistant Professor	21- July -22	Urban Design
20	Deeksha Singh	Assistant Professor	21- July -22	Urban Planning
21	Ar. Prashi Malik	Assistant Professor	21- July -22	Landscape Architecture
22	Ar. Supriya K.	Assistant Professor	19- July -23	Interior Architecture and Design
23	Dhruv Shrivastava	Assistant Professor	21- July -22	Visual Graphics and Animation
24	Pariniti Singh	Assistant Professor	21- July -23	User Experience Design
25	Vansh Grover	Assistant Professor	21- July -23	User Experience Design

#### List of Publications

#### **SCI/Scopus indexed Journals**

- 1. Sharma, A., & Kumar, A. (2023). Adaptive thermal comfort of residential buildings in the composite climatic region of India: a field study. Architectural Engineering and Design Management, 1-22, DOI: <a href="https://doi.org/10.1080/17452007.2023.2201416">https://doi.org/10.1080/17452007.2023.2201416</a>. [Q1 Category Journal]
- 2. Akhilesh K. (2023). User Experience and Expectations of Streetscape: A Planning Framework for Urban Streets in India. Civil Engineering and Architecture. Civil Engineering and Architecture, 11(3): 773–783, DOI: https://doi.org/10.13189/cea.2023.110329. [Q2 Category Journal]
- 3. Akhilesh K. (Dec, 2022). Determining Water Footprint of Buildings during Construction Phase: An Activity-Based Approach. Civil Engineering and Architecture, 11(2): 773-783, DOI: https://doi.org/10.13189/cea.2023.110218. [Q2 Category Journal]

#### Peer Reviewed Journals

1. Akhilesh K. (Nov 2022), Changing Facets of Architectural Education in Modern Time. Journal of The Indian Institute of Architects, 87(11): 97–101, Available at https://indianinstituteofarchitects.com/jiia-e-magazine/.

#### **Papers in Conferences**

- 1. Akhilesh, Kumar, Pneumatic waste collection system a proposed innovation for Indian Institute of Technology, Roorkee Campus: India (March 15th to 16th 2022). Proceedings of 1st International Conference on Design Innovations and Management for Sustainable Environment (ICDIMSE 2022), Available at https://doi.org/10.1088/1755-1315/1210/1/012002.
- 2. Kumar, Akhilesh, 3D Printing of The Building: Futuristic Construction Technological Advancement of BIM & Utilization of waste as Raw Material (August 2nd to 3rd, 2022). Proceedings of Two-day National Conference on Urban Interventions: Environmental, Social and Economic.
- Kumar, Akhilesh, Zero Waste Management Approaches and Strategies for DIT University Dehradun campus (September 15th to 17th, 2022). Proceedings of i-Converge 2022, Available at https://doi.org/10.4324/9781003450221-2.
- 4. Kumar, Akhilesh, The impact of water management in Institutional Campuses: The case of Indian Institute of Technology Roorkee (August 2nd to 3rd, 2022). Proceedings of Two-day National Conference on Urban Interventions: Environmental, Social and Economic.
- 5. Kumar, Akhilesh, Smart City Planning in India A Case of Dehradun City (September 15th to 17th, 2022). Proceedings of i-Converge 2022, Available at https://doi.org/10.4324/9781003450221-2.
- 6. Sharma, Aanchal and Kumar, Ashok, Adaptive Thermal Comfort In The Naturally Ventilated Residential Buildings In The Composite Climate of India (November 3rd to 5th, 2022). Proceedings of 9th Zero Energy Mass Custom Home International Conference, ZEMCH 2022, Available at https://doi.org/10.1080/17452007.2023.2201416.
- Agarwal, Bindu and Sharma, Aanchal and Agarwal, Simran, Effect of Land Use Land Cover Change On The Architectural Style And Community At Dehradun Of Uttarakhand (November 3rd to 5th, 2022). Proceedings of 9th Zero Energy Mass Custom Home International Conference, ZEMCH 2022.
- 8. Pathak, Abhilasha and Mishra, Sudipta and Sharma, Aanchal, Assessing, Evaluating Seismic Sensitive Parameters of Historic Constructions: A Taxonomy of Kathmandu Valley, Nepal (November 3rd to 5th, 2022). Proceedings of 9th Zero Energy Mass Custom Home International Conference, ZEMCH 2022.
- 9. Mandadi, Pratima Kiran and Kapoor, Manjari Khanna, and Raghavendran, Ramesh, and Sharma, Aanchal, POE & Office Interior Design: Design Intervention on Occupant Satisfaction and Well-being (November 3rd to 5th, 2022). Proceedings of 9th Zero Energy Mass Custom Home International Conference, ZEMCH 2022.
- 10. Goyal, Harsh and Sharma, Aanchal and Sharma, Anjali Krishan, Evaluating the Urban Heat Island Mitigation Potential in the foothills of Uttarakhand through Native Green Roofing System (August 31st to September 2nd, 2022). Proceedings of International SEEDS 2022 Conference.

## **List of Research Projects**

S. No.	Title of the Project	Project Investigator/s	Funding Agency	Amount(in INR)	Status
1	A comparative evaluation of roofing systems thermal performance in the composite climate of Dehradun	Aanchal Sharma & Harsh Goyal	DITU Seed Grant	INR 2,28,000	Completed
2	Thermo - physical evaluation of traditional and contemporary building envelope constructions for developing adaptive model for thermal comfort of naturally ventilated and mixed mode residential buildings	Aanchal Sharma	DST-SERB TARE Grant	INR 15,00,000	Ongoing
3	An experimental evaluation of the hydrological performance of extensive green roofs in the foothills of the Himalayas, Uttarakhand	Aanchal Sharma, Tarumay Ghoshal & Naveen Singhal	DST Water Technology Call for Proposals 2023	INR 26,85,649	Submitted

## **List of Consultancy Projects**

S. No.	Title of the Project	Project Investigator/s	Funding Agency	Amount(in INR)	Status
1	Formulating Heritage Byelaws of Lakhamandal, Uttarakhand	Dr. Anjali Krishan Sharma	National Monument Authority	90,680	Completed
2	Formulating Heritage Byelaws of Katarmal, Uttarakhand	Dr. Anjali Krishan Sharma	National Monument Authority	77,180	Completed

## **Master's Thesis Details**

S. No	o. Student	Title of Thesis	Supervisor (s)
1	Himadri Gogoi	Towards a child friendly Neighborhood- A case of Dehradun City	Dr. Ashutosh Joshi
2	Vikas Nautiyal	Planning of Dehradun Metro Corridor	Dr. Ashutosh Joshi
3	Vipin Kumar	Solid waste management of Roorkee	Dr. Ashutosh Joshi and Dr. Akhilesh Kumar

## **Master's Thesis Details**

S. No.	Resea	rch Scholar	Title of Thesis	Supervisor(s)	Status
1	JK Sarohi		usehold energy consumption kee City: a case study	Dr. Anjali Krishan Sharma	Ongoing
2	Udita Devrani		nable architecture through adigenous buildings materials of	Dr. Ashutosh Joshi and Dr. Akhilesh Kumar	Ongoing

## FDP/FIP/FAP/SDP attended by faculty members FDP

S. No.	Faculty	Title	Organized by	Date	
1	Rajarshi Roy	Livable Indian Cities	COA-TRC Bhopal	2nd to 6th January 2023	
2	Dr Akhilesh Kumar	Faculty Development Programme on "Planning Strategies for Urban Challenges" (PSUC-2022)	Department of Architecture and Planning, NIT, Hamirpur, HP	27th June 2022- 1st July 2022	
3	Dr Akhilesh Kumar	Faculty Development Programme on "Learning LaTeX for Research writing."	Teaching Learning Centre (TLC), DIT University, Dehradun	20th June-24th June'2022	
4	Dr Akhilesh Kumar	E-Waste Management in India	Center For Environment Science, New Delhi	25th Sept to 1st Oct 2022	
5	Ar.Vartica Saxena	Imagine XP Training Programme	Imagine XP	25-29 July,2022	
6	Ar. Vartica Saxena	NPTEL- Principles of Building Design	NPTEL Swayam	4 weeks course in July-August,22	
7	Ar. Sandeep Mohan Saxena	Imagine XP Training Programme	Imagine XP	25-29 July,2022	
8	Ar. Sandeep Mohan Saxena	NPTEL- Visual Communication Design For Digital Media	Swayam	4 weeks course in July-August, 2022	

## FAP

S. No.	Faculty	Title	Organized by	Date (From –to)
1	Jitendra K. Sarohi	Teaching and Learning	Teaching and Learning IIT Bombay	
2	Rajarshi Roy	Cities: A tale of Morphosis	Woxsen University	8th June 2023
3	Ar. Vartica Saxena	RACHNA		1-2 August.2022
4	Ar. Vartica Saxena	Lecture on IPR	NITTE, Institute of Architecture	21st July,22
5	Ar. Vartica Saxena	Lecture on managing succeses and Failures	Mr. Sandeep Sancheti	25th July 2022
6	Ar. Vartica Saxena	Seminar series conducted by Ultra- Tech Cement	Ultra-Tech Cement	Conducted on multiple weekends
7	Ar. Sandeep Mohan Saxena	RACHNA	NITTE, Institute of Architecture	1-2 August.2022
8	Ar. Sandeep Mohan Saxena	Lecture on IPR		21st July,22
9	Ar. Sandeep Mohan Saxena	Lecture on managing succeses and Failures	Mr. Sandeep Sancheti	25th July 2022

## FDP/FIP/FAP/SDP Organized by the School

S. No.	Title	Convener / Organizing Secretary	Date (From -to)	Remarks
1	Liveable Indian cities	Ar.Vartica Saxena, Ar. Vedangi Deshpande, Ar. Rajarshi Roy,	2-6th January, 2023	COA and TRC Bhopal
2	Five Days Faculty Development Program on Architecture Urbanism: Adapting Cities to Climate change & Resilience	Dr. Ashutosh Joshi, Ar. Vedangi Deshpande	29th May to 2nd June,2023	COA and TRC Bhopal

## Conferences/workshop/seminars/ webinars attended by faculty members

S. No.	Faculty	Title	Organized by	Date
1	J.K. Sarohi	Learn to use AI to write research papers	Data Insights, Online	8 April 2023
2	J.K. Sarohi	RACHNA	Ministry of Housing and Urban Affairs	August 2022
3	J.K. Sarohi	l converge	Organizing Committee member	15-17 Sept 2023
4	J.K. Sarohi	NATA Observer	СоА	July 07, 2023
5	Dr Akhilesh Kumar	3D Printing of The Building: Futuristic Construction Technological Advancement of BIM & Utilization of Waste as Raw Material,	NIT Raipur	2nd and 3rd August 2022
6	Dr Akhilesh Kumar	Zero Waste Management Approaches and Strategies for DIT University Dehradun campus, published in Conference Proceedings i-Converge 2022,		15th sept 2022- 17th sept 2022
7	Dr Akhilesh Kumar	Changing Facets of Architectural Education in Modern Time, Published in Journal of The Indian Institute of Architects	Journal of Indian Institute of Architects, India.	January 2023
8	Dr Akhilesh Kumar	The impact of water management in Institutional Campuses: The case of Indian Institute of Technology Roorkee,	NIT Raipur	2nd and 3rd August 2022
9	Dr Akhilesh Kumar	Smart City Planning in India – A Case of Dehradun City	i-Converge, SOAPD, DIT University, Dehradun India	15th sept 2022- 17th sept 2022
10	Ar. Vartica Saxena	i-Converge	SoAPD	15-16-17th September,23
11	Ar. Vartica Saxena	Energy Efficiency in HVAC Systems and EE Technology	CII IGBC Webinar	July,22
12	Ar. Sandeep Mohan Saxena	i-Converge	SoAPD	15-16-17th September,23
13	Ar. Sandeep Mohan Saxena	Energy Efficiency in HVAC Systems and EE Technology	CII IGBC Webinar	July,22

14	Ar. Sandeep Mohan Saxena	Learn: Green Building Compliance and energy Simulation Software	Urban Planning section, Sardar Vallabhbhai National Institute of Technology, Surat,	29th May- 2nd June, 2023
15	Dr. Ashutosh Joshi	Delivered Lecture: Built Heritage Values in Architectural Design	Woxsen University	29th May-2nd June 2023
16	Dr. Ashutosh Joshi	Delivered Lecture: CITIES: A tale of Morphosis	Woxsen University	8 June 2023

## Conferences/workshop/seminars/webinars organized by the School

S. No.	Title	Convener / Organizing Secretary	<b>Date</b> (From –to)
1	International Conference- iConverge	Aanchal Sharma	15-17 September 2022

## **Bachelors Projects**

Total Number of Projects	Projects domains
	Interior design
57	Hospitals
	Resorts

## Patents (Granted/Published/Filed)

S. No.	Name of Applicant/s	Name of Inventor/s	Title with name of patent agency	Status
1	Aanchal Sharma and Harsh Goyal	Aanchal Sharma and Harsh Goyal	Green Roof Retrofitted over Sloping GI-Sheet Truss Type Roofs / IP India	Published
2	Abhilasha Pathak	Sadiya Murtaza Mudita Chughwere Abhilasha Pathak	Wall Hanging Bulb, The Patent Office, Govt. of India	Published

## National/International Award/Recognition received by faculty members

S. No.	Name of Faculty Member	Name of Award	Awarding Agency	
1	JK Sarohi	HoD of the year Award	Institute of Scholars	194
		Outstanding Leadership Award in Academic Year 2022-23	DIT University	
		UGC Reviewer for Fellowship Research grant scheme through FRG portal	University Grant Commission	

Dr. Akhilesh Kumar  Best Paper Award for " Pneumatic collection system - A proposed innovation for Indian Institute of Technology, Roorkee Campus, India ICDIMSE 2022, IOP Conference Ser Earth and Environmental Science a Sathyabama University SIST Chenn

IOP Conference Series: Earth and Environmental Science at Sathyabama University SIST Chennai



## **MOUs/Academic Collaboration**

S.No	Name of Institutes/Industries	City/Country	Purpose	Du Signed on	ration Valid till
1	Society for Development Alternatives (DA)	Dehradun	Organizational Collaboration	July,12,2021	June,30,2026
2	IMAGINXP (Giggle Galaxy Pvt. Ltd.) – M .Des	Dehradun	Industry Collaboration	April,14,2019	April,13,2023
3	IMAGINXP (Giggle Galaxy Pvt. Ltd.) - B.Des	Dehradun	Industry Collaboration	April,18,2018	April,17, 2024
4	Indian Institute of Remote Sensing (IIRS), Dehradun	Dehradun	Institutional Collaboration	July,29,2020	July,28,2030
5	RVS Chennai Padmavathy School of Architecture	Dehradun	Institutional Collaboration	June,09,2022	June, 08, 2024

## **SCHOOL OF COMPUTING**

## List of Programmes

S. No	Program Offered	Year of Establishment
1	B. Tech in Computer Science & Engineering	2013
2	B. Tech in Computer Science & Engineering with Specialization in Artificial Intelligence, Machine Learning and Robotics	2020
3	B. Tech in Computer Science & Engineering with Specialization in Data Science and Analytics	2020
4	B. Tech in Computer Science & Engineering with Specialization in Internet of Things and Edge Computing	2020
5	B. Tech in Computer Science & Engineering with Specialization in Cybersecurity and Privacy	2020
6	B. Tech in Computer Science & Engineering with Specialization in Computer Vision and Biometrics	2020
7	B. Tech in Computer Science & Engineering with Specialization in Cloud Computing and Blockchain	2020
8	B. Tech. in Computer Science & Engineering with Specialization in Full Stack and DevOps	2020
9	B. Tech. in Computer Science & Engineering with Specialization in Chip Design	2023
10	B. Tech. in Information Technology	2013
11	Bachelor of Computer Applications	2017
12	M. Tech. in Computer Science and Engineering	2013
13	Master of Computer Applications	2013
14	Ph.D. in Computer Science and Engineering in the department of CSE	2014
15	Ph.D. in Computer Sciences in the department of Computer Applications	2015
16	Diploma in Computer Science & Engineering	2018

## **List of Faculty Members**

S. No	Name of Faculty Member	Designation	Date of Joining	Specialization
1	Dr. Debopam Acharya	Professor and Dean SOC	1-0ct-19	Network, Mobile Computing and Internet of Things
2	Dr. Hemraj Saini	Professor & Dean RNC	31-Dec-21	Cybersecurity and Privacy
3	Dr. Rama Sushil	Professor	10-Jul-13	Artificial Intelligence, Machine Learning and Robotics

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4	Dr. Amit Kumar Mishra	Associate Prof.	20-Jan-18	Artificial Intelligence, Machine Learning and Robotics
5	Dr. Ashok Kumar	Associate Professor, & Head CSE , IT	15-Jan-13	Artificial Intelligence, Machine Learning and Robotics
6	Dr. Bharti Sharma	Assistant Prof. & Head BCA/MCA	08-Jul-19	Data Science and Analytics
7	Dr. Madhu Kumari	Professor	01-Jan-23	Data Science and Analytics
8	Dr. Anil Kumar	Professor	01-Aug-18	Data Science and Analytics
9	Dr. Deepshikha Bhargava	Professor	19-Jan-22	Artificial Intelligence, Machine Learning and Robotics
10	Dr. Jay R. Bhatnagar	Professor	25-Mar-22	Artificial Intelligence, Machine Learning and Robotics
11	Dr. Anurag Aeron	Associate Professor	7-Jan-20	Artificial Intelligence, Machine Learning and Robotics
12	Dr. Garima Verma	Associate Professor	2-Sep-13	Network, Mobile Computing and Internet of Things
13	Dr. Megha	Associate Professor	1-Sep-20	Artificial Intelligence, Machine Learning and Robotics
14	Dr. Srabanti Maji	Associate Professor	2-Jul-15	Artificial Intelligence, Machine Learning and Robotics
15	Dr. Rakesh Kumar Saini	Assistant Professor - I	1-Sep-08	Network, Mobile Computing and Internet of Things
16	Dr. Narendra Kumar	Assistant Professor – I	4-Jul-07	Network, Mobile Computing and Internet of Things
17	Dr. Neeraj Kumar Pandey	Assistant Professor - I	5-Jul-18	Network, Mobile Computing and Internet of Things
18	Dr. Arshad Husain	Assistant Professor - II	09-Jul-19	Computer Vision and Biometrics
19	Dr. Pradeep Singh Rawat	Assistant Professor - II	07-Jan-10	Data Science and Analytics
20	Dr. Ajay Narayan Shukla	Assistant Professor - I	11-Aug-12	Artificial Intelligence, Machine Learning and Robotics
21	Dr. Priyanka Dahiya	Assistant Professor - II	01-Aug-18	Data Science and Analytics
22	Dr. Kriti	Assistant Professor - II	06-Jul-20	Computer Vision and Biometrics / Chip Design and VLSI
23	Dr. Anuj Kumar Yadav	Assistant Professor - II	15-Jul-09	Cybersecurity and Privacy
24	Dr. Navjot Saini	Assistant Professor - III	10-0ct-22	Artificial Intelligence, Machine Learning and Robotics/ Chip Design and VLSI
25	Dr. Gaurav Dhiman	Assistant Professor – I	22-Jan-21	Artificial Intelligence, Machine Learning and Robotics / Chip Design and VLSI

26	Dr. Bibek Kumar Katiyar	Assistant Professor - III	01-Jan-18	Artificial Intelligence, Machine Learning and Robotics
27	Dr. Chirag Joshi	Assistant Professor - III	27-Jun-16	Artificial Intelligence, Machine Learning and Robotics
28	Dr. Madhu Sharma	Assistant Professor - III	12-Sep-12	Cybersecurity and Privacy
29	Dr. Aditya Dev Mishra	Assistant Professor - III	16-Jul-19	Computer Vision and Biometrics
30	Dr. Naveen Kumar	Assistant Professor - III	18-Jul-19	Computer Vision and Biometrics
31	Dr. Surbhi Patel	Assistant Professor – III	18-jul-22	Network, Mobile Computing and Internet of Things
32	Dr. Shirshendu Layek	Assistant Professor - III	18-Aug-22	Artificial Intelligence, Machine Learning and Robotics
33	Dr. Abhilasha Chauhan	Assistant Professor - III	31-Aug-22	Network, Mobile Computing and Internet of Things
34	Dr. Suchi Johari	Assistant Professor - III	27-Sep-22	Network, Mobile Computing and Internet of Things
31	Dr. Pooja Gupta	Assistant Professor - III	12-Jul-19	Artificial Intelligence, Machine Learning and Robotics
32	Mr. Ankit Agarwal	Assistant Professor - III	16-Jul-19	Artificial Intelligence, Machine Learning and Robotics
33	Mr. Anurag Shrivastava	Assistant Professor - III	23-Jul-19	Artificial Intelligence, Machine Learning and Robotics
34	Ms. Ena Jain	Assistant Professor - III	13-Jul-18	Network, Mobile Computing and Internet of Things
35	Ms. Moumita Ghosh	Assistant Professor - III	12-Jul-18	Network, Mobile Computing and Internet of Things
36	Mr. Sanjeev Sharma	Assistant Professor - III	09-Jul-19	Network, Mobile Computing and Internet of Things
37	Ms. Sneh Lata Aswal	Assistant Professor - III	27-Jan-10	Network, Mobile Computing and Internet of Things
38	Mr. Tarun Kumar	Assistant Professor - III	10-0ct-19	Network, Mobile Computing and Internet of Things
39	Ms. Meghavi Rana	Assistant Professor - III	04-Jan-21	Artificial Intelligence, Machine Learning and Robotics
40	Mr. Diwaker	Assistant Professor - III	18-Jul-19	Artificial Intelligence, Machine Learning and Robotics
41	Mr. Chandra Prakash	Assistant Professor - III	02-Jul-19	Network, Mobile Computing and Internet of Things
42	Ms. Vishakha Arya	Assistant Professor - III	25-0ct-21	Artificial Intelligence, Machine Learning and Robotics
43	Ms. Ruchi Sharma	Assistant Professor - III	20-Jul-18	Data Science and Analytics

44	Mr. Saurabh Kumar	Assistant Professor - III	21-Aug-19	Cybersecurity and Privacy
45	Ms. Bhawna Srivastava	Assistant Professor - III	04-Jan-21	Artificial Intelligence, Machine Learning and Robotics
46	Ms. Shabnam	Assistant Professor - III	04-Jan-21	Artificial Intelligence, Machine Learning and Robotics
47	Ms. Shalini Kuchhal	Assistant Professor - III	11-Mar-22	Network, Mobile Computing and Internet of Things
48	Mr. Deep Kumar	Assistant Professor - III	6-Aug-09	Data Science and Analytics
49	Ms. Anushree Negi	Assistant Professor - III	02-Mar-22	Artificial Intelligence, Machine Learning and Robotics
50	Ms. Preeti Gupta	Assistant Professor - III	28-Mar-22	Artificial Intelligence, Machine Learning and Robotics
51	Ms. Rashika Bangroo	Assistant Professor - III	17-Feb2022	Data Science and Analytics
52	Mr. Vishal Srivastava	Assistant Professor – III	11-Jan2021	Computer Vision and Biometrics
53	Kapil Dev Sharma	Assistant Professor - III	1-Aug-22	Network, Mobile Computing and Internet of Things
54	Ravi Shankar Jha	Assistant Professor - III	1-Aug-22	Network, Mobile Computing and Internet of Things
55	Ravi dhoundiyal	Assistant Professor - III	1-Aug-22	Artificial Intelligence, Machine Learning and Robotics
56	Ankit Maithani	Assistant Professor - III	16-Aug-22	Artificial Intelligence, Machine Learning and Robotics
57	Sudhani Verma	Assistant Professor - III	21-Aug-22	Data Science and Analytics
58	Somil Kumar Gupta	Assistant Professor - III	31-Aug-22	Computer Security
59	Sonu Pant	Assistant Professor - III	16-Jan-23	Artificial Intelligence, Machine Learning and Robotics
60	Sanjay Kumar	Assistant Professor - III	24-Mar-23	Artificial Intelligence, Machine Learning and Robotics
61	Nidhi Wadhwa	Assistant Professor - III	18-Oct-22	Network, Mobile Computing and Internet of Things
62	Ishaan Dawar	Assistant Professor - III	17-Aug-22	Artificial Intelligence, Machine Learning and Robotics
63	Dr. Vivek Sethi	Assistant Professor – II	5-Jan-23	Artificial Intelligence, Machine Learning and Robotics

#### List of Publications

#### SCI/Scopus/WOS Index Journals

- 1. Dash, S., Sahu, P. K., Mishra, D., Mallick, P. K., Sharma, B., Zymbler, M., & Kumar, S. (July 2022). A Novel Algorithmic Forex Trade and Trend Analysis Framework Based on Deep Predictive Coding Network Optimized with Reptile Search Algorithm. Axioms, 11(8), 396, DOI: 10.3390/axioms11080396. [Q3 Journal]
- 2. Noori, M. A. R., Sharma, B., &t Mehra, R. (july 2022). Feature selection from disaster tweets using Spark-based parallel meta-heuristic optimizers. Social Network Analysis and Mining, 12(1), 1-18, DOI: 10.1007/s13278-022-00930-8. [Q1 Journal].
- 3. Ghosh, M., & Sushil, R. (Aug 2022). OpNeD: optimum neighbor density for maximizing lifetime of a wireless sensor network deployed for smart billing of utility services in Indian scenario. International Journal of Information Technology, 1–11, DOI: 10.1007/s41870-022-01056-y.
- 4. Sekar, K. R., Kumar, A., Dahiya, P., Haq, M. A., Subiksha, S. V., & Sethuvarsha, S. (July 2022). An innovative framework to forecast the best inventory management system module by hesitant fuzzy VQA-TOPSIS technique for textile industry. The International Journal of Advanced Manufacturing Technology, 1–16, DOI: 10.1007/s00170-022-09634-x. [Q1 Journal]
- 5. Kumar Pandey, R., Kumar, A., Mandal, A., & Vaferi, B. (July 2022). Genetic algorithm optimization of deep structured classifier-predictor models for pressure transient analysis. Journal of Energy Resources Technology, 145(2), 023003, DOI: 10.1115/1.4054896. [Q2 Journal]
- 6. Kumar, K., Kumar, N., Kumar, A., Mohammed, M. A., Al-Waisy, A. S., Jaber, M. M., Pandey, N. K.... & Al-Andoli, M. N. (July 2022). Identification of Cardiac Patients Based on the Medical Conditions Using Machine Learning Models. Computational Intelligence and Neuroscience, 2022, DOI: 10.1155/2022/5882144. [Q1 Journal]
- 7. Purbey, R., Parijat, H., Agarwal, D., Mitra, D., Agarwal, R., Pandey, R. K., & Dahiya, A. K. (July 2022). Machine learning and data mining assisted petroleum reservoir engineering: a comprehensive review. International Journal of Oil, Gas and Coal Technology, 30(4), 359–387, DOI: 10.1504/IJOGCT.2021.10043807. [Q4 Journal]
- 8. Kumar, B., Ranjan, R. K., & Husain, A. (July 2022). A New Synthetic Aperture Radar (SAR) Image Classification Framework Model using SAR Despeckling. International Journal of Computing and Digital Systems, 12(1), 1129–1144. DOI: dx.doi.org/10.12785/ijcds/120190. [SCOPUS Indexed]
- 9. Pandey, N. K., Diwakar, M., Shankar, A., Singh, P., Khosravi, M. R., & Kumar, V. (Aug 2022). Energy Efficiency Strategy for Big Data in Cloud Environment Using Deep Reinforcement Learning. Mobile Information Systems, 2022, DOI: 10.1155/2022/8716132
- 10. Sharma, M., Ranjan, R. K., & Bharti, V. (Sep 2022). A pseudo-random bit generator based on chaotic maps enhanced with a bit-XOR operation. Journal of Information Security and Applications, 69, 103299, DOI: 10.1016/j.jisa.2022.103299. [Q1 Journal]
- 11. Sharma, M., Ranjan, R. K., & Bharti, V. (Sep 2022). An image encryption algorithm based on a novel hyperchaotic Henon sine map. Multimedia Tools and Applications, 1-24, DOI: 10.1007/s11042-022-13733-y. [Q2 Journal]
- 12. Kumar, N., Kumar, A., & Kumar, K. (Sep 2022). Color Image Contrast Enhancement Using Modified Firefly Algorithm. International Journal of Information Retrieval Research (IJIRR), 12(2), 1–18, DOI: 10.4018/IJIRR.299944.
- 13. Mishra, A. K., & Paliwal, S. (Sep 2022). Mitigating cyber threats through integration of feature selection and stacking ensemble learning: the LGBM and random forest intrusion detection perspective. Cluster Computing, 1–12, DOI: 10.1007/s10586-022-03735-8. [Q2 Journal]
- 14. Sekar, K. R., AnulHaq, M., Kumar, A., Shalini, R., & Poojalaxmi, S. (Sep 2022). An improved ranking methodology for malignant carcinoma in multicriterian decision making using hesitant VIKOR fuzzy. Theoretical Computer Science, 929, 81–94, DOI: 10.1016/j.tcs.2022.06.031. [Q2 Journal]

- 15. Kumar, A., Alghamdi, S. A., Mehbodniya, A., Webber, J. L., & Shavkatovich, S. N. (Oct 2022). Smart power consumption management and alert system using IoT on big data. Sustainable Energy Technologies and Assessments, 53, 102555, DOI: 10.1016/j.seta.2022.102555. [Q1 Journal]
- 16. Mehbodniya, A., Webber, J. L., & Karupusamy, S., Kumar, A. ...(Oct 2022). Improving the geo-drone-based route for effective communication and connection stability improvement in the emergency area ad-hoc network. Sustainable Energy Technologies and Assessments, 53, 102558, DOI: 10.1016/j.seta.2022.102558. [Q1 Journal]
- 17. Revathy, G., Alghamdi, S. A., Alahmari, S. M., Yonbawi, S. R., Kumar, A., & Haq, M. A. (Oct 2022). Sentiment analysis using machine learning: Progress in the machine intelligence for data science. Sustainable Energy Technologies and Assessments, 53, 102557, DOI: 10.1016/j.seta.2022.102557. [Q1 Journal]
- 18. Verma, G. (Oct 2022). Blockchain-based privacy preservation framework for healthcare data in cloud environment. Journal of Experimental & Theoretical Artificial Intelligence, 1-14. DOI: 10.1080/0952813X.2022.2135611. [Q1 Journal]
- 19. Verma, G. (Nov 2022). Hybrid Optimization Model for Secure Task Scheduling in Cloud: Combining Seagull and Black Widow Optimization. Cybernetics and Systems, 1-23. DOI: 10.1080/01969722.2022.2157609. [Q2 Journal]
- 20. Sharma, M., Ranjan, R. K., & Bharti, V. (Sep 2022). An improved image encryption algorithm using a new byte-shuffled Henon map. International Journal of Information Technology, 1-11. DOI: 10.1007/s41870-022-01092-8. [Q2 Journal]
- 21. Kumar Pandey, R., Aggarwal, S., Nath, G., Kumar, A., & Vaferi, B. (Oct 2022). Metaheuristic algorithm integrated neural networks for well-test analyses of petroleum reservoirs. Scientific Reports, 12(1), 1-16.DOI: 10.1038/s41598-022-21075-w. [Q1 Journal]
- 22. Farooqui, N. A., Mishra, A. K., & Mehra, R. (Oct 2022). Concatenated deep features with modified LSTM for enhanced crop disease classification. International Journal of Intelligent Robotics and Applications, 1–25. DOI: 10.1007/s41315-022-00258-8. [Q3 Journal]
- 23. Bhardwaj, V., Gupta, H., Saini, R. K., Arya, B., Kumar, V., & Pallajaereng, A. A. (Oct 2022). IoT enabled smart farming and its convincing impact in the field of precision agriculture. Annals of forest research, 65(1):9272-9284. Retrieved from https://www.eafr.org/article/view/9272.html, DOI: 10.15287/afr.2022.9272. [Q2 Journal]
- 24. Bhardwaj, V., & Saini, R. K., (Nov 2022). Internet of things and its opportunities and impacts and proposed cross-layer design for internet of things. Tongji Daxue Xuebao/Journal of Tongji University, ISSN: 0253-374X, Vol: 50 Issue: 09 (Scopus indexed), DOI 10.17605/OSF.IO/TJDV50I9039, http://tjdxxb.periodicales.net/v50-i9-october-2022/. [Q3 Journal]
- 25. Saini, H., Dash, S., Pani, P., Sousa, M., & Rocha, A. (Oct 2022). Blockchain-based raw material shipping with PoC in Hyperledger Composer, 19(3):1075–1092. DOI: 10.2298/CSIS210930032S. [Q3 Journal]
- 26. Devi, A., Kumar, A., Rathee, G., & Saini, H. (Dec. 2022). User authentication of industrial internet of things (IIoT) through Blockchain. Multimedia Tools and Applications, 1–19. DOI: 10.1007/s11042-022-14154-7. [Q1 Journal]
- 27. Rajesh Kumar Maurya, Naveen Kumar, Vikas Srivastava, Sanjay Kumar, & Vimal Kumar (Nov. 2022). Prognostic and Diagnostic Prediction Models Of Invasive Cancer in Women and Its Detection Accuracy via Developing Machine Learning Techniques. Journal of Pharmaceutical Negative Results, 13(7):4282-4294. https://www.pnrjournal.com/index.php/home/article/view/5313/6350. [Q4 Journal]
- 28. Prakash, C., Barthwal, A., & Acharya, D. (Jan 2023). FLOODWALL: A Real-Time Flash Flood Monitoring and Forecasting System Using IoT. IEEE Sensors Journal, 23(1), 787–799. https://doi.org/10.1109/JSEN.2022.3223671 [Q1 Journal].
- 29. Karupusamy, S., Mustafa, M. A., Jos, B. M., Dahiya, P., Bhardwaj, R., Kanani, P., & Kumar, A. (Feb 2023). Torque control-based induction motor speed control using Anticipating Power Impulse Technique. The International Journal of Advanced Manufacturing Technology, 1–9. https://doi.org/10.1007/s00170-023-10893-5 [Ω2 Journal].

- 30. Rana, M., & Bhushan, M. (Mar 2023). Classifying breast cancer using transfer learning models based on histopathological images. Neural Computing and Applications, 1-15. https://doi.org/10.1007/s00521-023-08484-2 [Q1 Journal].
- 31. Gupta, P., Maji, S., & Mehra, R. (Mar 2023). Predictive Modeling of Stress in the Healthcare Industry during COVID-19: A Novel Approach Using XGBoost, SHAP Values, and Tree Explainer. International Journal of Decision Support System Technology (IJDSST), 15(1), 1-20. https://doi.org/10.4018/IJDSST.315758 [Q4 Journal].
- 32. Pandey, N. K., Kumar, K., Saini, G., & Mishra, A. K. (Mar 2023). Security issues and challenges in cloud of things-based applications for industrial automation. Annals of Operations Research, 1-20. https://doi.org/10.1007/s10479-023-05285-7 [Q1 Journal].
- 33. Verma, G., & Kumar, (Mar 2023) A. Novel quantum key distribution and attribute based encryption for cloud data security. Concurrency and Computation: Practice and Experience, e7700. http://doi.org/10.1002/cpe.7700 [Q2 Journal]
- 34. Verma, G., & Kanrar, S. (Mar 2022). Secure digital documents sharing using blockchain and attributebased cryptosystem. Multiagent and Grid Systems, 18(3-4), 365-379. https://doi.org/10.3233/MGS-221361 [Q4 Journal]
- 35. Karupusamy, S., Mustafa, M. A., Jos, B. M., Dahiya, P., Bhardwaj, R., Kanani, P., & Kumar, A. (Feb 2023). Torque control-based induction motor speed control using Anticipating Power Impulse Technique. The International Journal of Advanced Manufacturing Technology, 1–9. <a href="https://doi.org/10.1007/s00170-023-10893-5">https://doi.org/10.1007/s00170-023-10893-5</a> [Q2 Journal].
- 36. Tripathi, A. K., Gupta, P. K., Saini, H., & Rathee, G. (Feb 2023). MVI and Forecast Precision Upgrade of Time Series Precipitation Information for Ubiquitous Computing. Informatica, 47(5).
- 37. Bhushan, M., Pandit, A., & Garg, A. (Apr 2023). Machine learning and deep learning techniques for the analysis of heart disease: a systematic literature review, open challenges and future directions. Artificial Intelligence Review, 1–52. https://doi.org/10.1007/s10462-023-10493 5 [Q1 Journal]
- 38. Kumar, A., & Verma, G. (June 2023). Revolutionizing Cloud Security: Leveraging Quantum Computing and Key Distribution for Enhanced Protection. The Review of Socionetwork Strategies, 1–13. https://link.springer.com/article/10.1007/s12626-023-00140-4
- 39. Gautam, V., Ranjan, R. K., Dahiya, P., & Kumar, A. (June 2023). ESDNN: A novel ensembled stack deep neural network for mango leaf disease classification and detection. Multimedia Tools and Applications, 1–27. https://doi.org/10.1007/s10462-023-10451-1 [Q1 Journal]

## **Papers in Conferences**

- Sundriyal, Naman and Agarwal, Hritika and Singh, Mayank Kumar and Maji, Srabanti, GSM Based Gas Leakage Detection System (July 14, 2022). Proceedings of the Advancement in Electronics & Communication Engineering 2022, Available at SSRN: https://ssrn.com/abstract=4157557 or http://dx.doi.org/10.2139/ssrn.4157557.
- 2. Maji, Srabanti and Jain, Hritik and Pandey, Vasu and Siddiqui, Vais Ahmed, White Hat Security-An Overview of Penetration Testing Tools (July 14, 2022). Proceedings of the Advancement in Electronics & Communication Engineering 2022, Available at SSRN: https://ssrn.com/abstract=4159095 or http://dx.doi.org/10.2139/ssrn.4159095
- 3. Thapa, A., Dhapola, C. S., & Saini, H. (2022, August). Security Analysis of User Authentication and Methods. In Proceedings of the 2022 Fourteenth International Conference on Contemporary Computing (pp. 564–572). DOI: 10.1145/3549206.3549304

- Rajat Srivastava, Srabanti Maji and Trinath Panda (2022). Machine Learning techniques in cardiovascular disease prediction. 12th International Advanced Computing Conference on 16th & 17th Dec'22 @ CMR College of Engineering & Technology, Hyderabad, Telangana, India. https://doi.org/10.1007/978-3-031-35641-4\_16
- 5. Yadav, A.K., Garg, M.L., Ritika (2023). Security-Aware Efficient Multi-tenant Cloud Environment. In: Ramdane-Cherif, A., Singh, T.P., Tomar, R., Choudhury, T., Um, JS. (eds) Machine Intelligence and Data Science Applications. MIDAS 2022. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-99-1620-7\_33
- 6. Baluni, S., Dutt, S., Dabral, P., Maji, S., Kumar, A., & Chaudhary, A. (2022, October). Penetration Testing on Virtual Machines. In 2022 10th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO) (pp. 1-6). IEEE. DOI:10.1109/ICRITO56286.2022.9964926
- 7. Verma, G., Nijhawan, V., & Kumar, A. (2022, October). A Supervised Ensemble Machine Learning Model To Predict Diabetes At Early Stage. In 2022 10th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO) (pp. 1-4). IEEE. DOI:10.1109/ICRITO56286.2022.9965058.
- 8. Jangir, Y., Goyal, T., Kandari, S., & Husain, A. (2022). Soil Classification and Crop Prediction Using Machine Learning. In International Conference on Computational Intelligence and Smart Communication (pp. 16-21). Springer, Cham. https://doi.org/10.1007/978-3-031-22915-2\_2

#### **Books**

- 1. P. R Anisha, C. Kishor Kumar Reddy, Nguyen Gia Nhu, Megha Bhushan, Ashok Kumar and Marlia Mohd Hanafiah, Intelligent Systems and Machine Learning for Industry: Advancements, Challenges, and Practices, (1st ed.), CRC Press, 2022. https://doi.org/10.1201/9781003286745,.
- 2. Punit Gupta, Dinesh Kumar Saini, Pradeep Rawat, Kashif Zia (2022). Bio-Inspired Optimization in Fog and Edge Computing Environments, 1st Edition, Auerbach Publications, New York. ISBN 9781032262901.
- 3. Rakesh Kumar Saini, M.M.S. Rauthan, Abhay Saxena, Bindu Sharma (2022). Database Management System, Plus F-aasured, ISBN: 978-93-80097-38-1.
- 4. Kumar, A., Bhushan, M., Galindo, J. A., Garg, L., & Hu, Y. C. (Eds.). (2023). Machine Intelligence, Big Data Analytics, and IoT in Image Processing: Practical Applications. John Wiley & Sons.

## **Book Chapters**

- 1. Pradeep Singh Rawat, Srabanti Maji, Devendra Prasad (2022). Resource Management in Fog Computing Environment Using Optimal Fog Network Topology, In Bio-Inspired Optimization in Fog and Edge Computing Environments by Punit Gupta, Dinesh Kumar Saini, Pradeep Rawat, Kashif Zia,1st Edition, pagese-16, Auerbach Publications, DOI: 10.1201/9781003322931-11.
- 2. Pradeep Singh Rawat, Srabanti Maji, Devendra Prasad (2022). Application of Optimization Techniques in Cloud Resource Management. In Bio-Inspired Optimization in Fog and Edge Computing Environments by Punit Gupta, Dinesh Kumar Saini, Pradeep Rawat, Kashif Zia, 1st Edition, pagese-18, Auerbach Publications, DOI: 10.1201/9781003322931-4.
- 3. Pradeep Singh Rawat, Srabanti Maji, Devendra Prasad (2022). Geographic Information Systems-Based Modeling of Health Care Data and its Optimization Using Various Approaches. In Bio-Inspired Optimization in Fog and Edge Computing Environments by Punit Gupta, Dinesh Kumar Saini, Pradeep Rawat, Kashif Zia, 1st Edition, pagese-18, Auerbach Publication, DOI: 10.1201/9781003322931-4.

- 4. Devendra Prasad, Pradeep Singh Rawat, Neeraj Rathore (2022). Optimized Cloud Storage Data Analysis Using the Machine Learning Model. In Bio-Inspired Optimization in Fog and Edge Computing Environments by Punit Gupta, Dinesh Kumar Saini, Pradeep Rawat, Kashif Zia, 1st Edition, pagese-20, Auerbach Publications, DOI: 10.1201/9781003322931-10.
- 5. Dr. Pradeep Singh Rawat Ujjwal Bhushan, Srabanti Maji, Pradeep Singh Rawat (2022). Applications of Fog in Healthcare Services. Bio-Inspired Optimization in Fog and Edge Computing Environments, In Bio-Inspired Optimization in Fog and Edge Computing Environments by Punit Gupta, Dinesh Kumar Saini, Pradeep Rawat, Kashif Zia, 1st Edition, pagese-22, Auerbach Publications, DOI: 10.1201/9781003322931-12.
- A. Chauhan, S. Saini, L. Sapra, G. Thakur, "Intrusion Detection Systems Apropos of the Internet of Things (IoT)", Internet of Things and Cyber Physical Systems: Security and Forensics (1st ed.). Published by CRC Press, Taylor and Francis Group. https://doi.org/10.1201/9781003283003, Dec 29, 2022.
- 7. S. Saini, A. Chauhan, L. Sapra, G. Thakur, "Emerging Trends in Security, Cybercrime, and Digital Forensics in the Context of the Internet of Things", Internet of Things and cyber Physical Systems: Security and Forensics (1st ed.), Published by CRC Press, Taylor and Francis Group. https://doi.org/10.1201/9781003283003, Dec 29, 2022.
- 8. Maji, S., Rawat, P. S., & Dua, A. (2023). Geographic Information Systems-Based Modeling of Health Care Data and its Optimization Using Various Approaches. In Bio-Inspired Optimization in Fog and Edge Computing Environments (pp. 55-72). Auerbach Publications. https://doi.org/10.1201/9781003322931
- 9. Rawat, P. S., Maji, S., & Prasad, D. (2023). Resource Management in Fog Computing Environment Using Optimal Fog Network Topology. In Bio-Inspired Optimization in Fog and Edge Computing Environments (pp. 185–200). Auerbach Publications. https://doi.org/10.1201/9781003322931
- 10. Rawat, P. S., Maji, S., & Prasad, D. (2023). Applications of Fog in Healthcare Services. In Bio- Inspired Optimization in Fog and Edge Computing Environments (pp. 201–223). Auerbach Publications. https://doi.org/10.1201/9781003322931
- 11. Kumar, D. (2023). Fog Computing and Vehicular Networks for Smart Traffic Control: Fog Computing-Based Cognitive Analytics Model for Smart Traffic Control. In Bio-Inspired Optimization in Fog and Edge Computing Environments (pp. 139–146). Auerbach Publications. https://doi.org/10.1201/9781003322931
- 12. Megha Bhushan, Maanas Singal, Shirshendu Layek, Arun Negi (2023). Autonomous Navigation of Rovers Using ML and DL Techniques, In Al-Enabled Social Robotics in Human Care Services by Sandeep Kautish (Lord Buddha Education Foundation, Nepal), Nirbhay Kumar Chaubey (Ganpat University, India), S.B. Goyal (City University, Malaysia), and Pawan Whig (Vivekananda Insitute of Professional Studies, India). https://doi.org/10.4018/978-1-6684-8171-4
- 13. Kumar, N. (2023). Future Challenges in Fog and Edge Computing Applications. In Bio-Inspired Optimization in Fog and Edge Computing Environments (pp. 39-54). Auerbach Publications. https://doi.org/10.1201/9781003322931-3
- 15. Kumar, K., Saini, G., Shah, R., Kumar, N., & Gupta, M. (2023). 9 IoT-Based Dam and Barrage Monitoring System. Enabling Methodologies for Renewable and Sustainable Energy, 151. https://doi.org/10.1201/9781003272717-9
- 16. Dr. Neeraj Kumar Pandey Pandey, N. K., Kashyap, S., Sharma, A., & Diwakar, M. (2023). Contribution of Cloud-Based Services in Post-Pandemic Technology Sustainability and Challenges: A Future Direction. Evolving Networking Technologies: Developments and Future Directions, 55-74. https://doi.org/10.1002/9781119836667.ch4
- Dr. Megha Bhushan Megha Bhushan, Arun Negi (2023). Impact of UAVs in Agriculture, Handbook of Research on Machine Learning-Enabled IoT for Smart Applications Across Industries, IGI Global. https://doi.org/10.4018/978-1-6684-8785-3.ch013.

# List of Research Projects

S. No.	Title of the Project	Project Investigator/s	Funding Agency	Amount (in INR)	Status
1	Use of Fossil Energy and the Emission of Carbon Dioxide Analysis in Smart Cities using IOT,	Dr. Narendra Kumar, Co-PI: Dr. Anil Kumar	DST Accelerating CCUS Technologies (ACT4) call 2022	32,40,000	Under Review
2	Multi-Video Live Processing to detect Objects in Real-Time at Edge Level	Dr. Hemraj Saini & Dr. Anurag Aeron	SERB & State University Research Excellence (SURE).	25,59,685	Under Review
3	Smart Energy-saving protocol for precision Agriculture in Wireless sensor network	Dr. Rakesh K. Saini	SERB-CRG	14,00,000	Under Review
4	GeoAware	Dr. Garima Verma & Prof. Siddarth Chauhan	SERB-TARE	15,00,000	Under Review
5	Cloud based smart water meter	Dr. Narendra Kumar & Dr. Hemraj Saini	UCOST	2,31,545	Under Review

## **Master's Thesis Submitted**

S.No.	Student	Title of Thesis	Supervisor (s)
1	Akshat Kapoor	Modified SASE Architecture with Morse Code Encryption	Dr. Hemraj Saini & Ravi Shankar Jha
2	Sumedha Bhardwaj	Classification of Medicinal Plants using ML and IoT	Dr. Debopam Acharya
3	Someswar Pal	Artificial intelligence based framework for predicting monkeypox disease	Dr. Amit Kumar Mishra & Dr. Kriti
4	Pankaj Kholiya	Exploring artificial intelligence based techniques for prediction of lumpy skin disease	Dr. Kriti & Dr. Amit Kumar Mishra
5	Rajat Srivastava	Machine Learning techniques in cardiovascular disease prediction	Dr. Srabanti Maji

# Ph.D Thesis Details (Awarded, Submitted followed by Ongoing)

S.No.	Research Scholar	Title of Thesis	Supervisor (s)	Status
1	Ajay Kumar	Design of Machine Learning Based Approach for Predication of Cancer Using Big Data Analytics	Dr. Rama Sushil and Dr. Arvind Kumar Tiwari, (Associate Professor, KNIT Sultanpur)	Awarded
2	Ajay Narayan Shukla	An Improved Approach to Solve Graph Colouring Problem	Dr. Vishal Bharti and Dr. M. L. Garg	Awarded
3	Anuj Kumar Yadav	An Approach for Enhanced Security in Cloud Computing Environment	Dr. Ritika and Dr. M. L. Garg	Awarded
4	Ankita Tyagi	Optimized Intelligent Disease Prediction and Classification Using Improved Machine Learning Techniques	Dr. Ritika and Dr. Rakesh Saini	Awarded

5	Aditi Nautiyal	Machine Learning Approach for Intelligent Prediction of petroleum upstream stuck pipe challenge using Realtime data	Dr. Amit Kumar Mishra Dr. Amit Kumar Mishra and Dr. Ritika	Awarded
6	Nafees Akhter Farooqui	Novel Machine Learning Technique for Real World Data	Dr. Arshad and Dr. Ranjeet Kumar Ranjan	Awarded
7	Bibek Kumar	Object Recognition in Synthetic Aperture Radar (SAR) Image Using Deep Learning Approaches.	Dr. Ranjeet Kumar	Awarded
8	Chirag Joshi	BOTNET Detection Using Machine Learning	Ranjan and Dr Vishal Bharti	Awarded
9	Madhu Sharma	Image Based Implementation of Chaotic Maps in Cryptography	Dr.Hemraj Saini, Dr. Ranjeet Kumar Ranjan and Dr. Vishal Bharti	Awarded
10	Mohammed Ahsan Raza Noori	Event detection from social media using Big Data Techniques	Dr. Bharti Sharma and Dr. Ritika	Thesis Submitted
11	Pooja Gupta	Predictive Modelling of Stress/Anxiety Disorder Using Machine Learning	Dr. Srabanti Maji and Dr. Ritika	Final Defence Done
12	Ena Jain	Monitoring and Modelling Air Quality using Internet of Things	Dr. Debopam Acharya	Ongoing
13	Nidhi Wadhwa	Activity and event recognition in smart home environment	Dr. Debopam Acharya	Ongoing
14	Tarun Kumar	Development of Sensor Fusion Framework for Road Surface Monitoring	Dr. Debopam Acharya	Ongoing
15	Chandra Prakash	IoT Based Pluvial and Fluvial Flash Flood Risk Monitoring, Modeling and Forecasting	Dr. Anurag Barthwal and Dr. Debopam Acharya	Ongoing
16	Shalini Kuchhal	IoT based indoor environment sensing & monitoring for comfort assessment	Dr. Debopam Acharya	Ongoing
17	Ankit Agarwal	Design and Validation of an efficient Machine Learning Technique for Heart Diseases Prediction	Dr. Rama Sushil	Ongoing
18	Anurag Shrivastava	Automated Melting Point determination of Chemical Substances using Image Change Detection	Dr. Rama Sushil	Ongoing
19	Bhavana Shrivastava	A deep learning model to determine the dissolution time of a drug	Dr. Rama Sushil	Ongoing
20	Moumita Ghosh	Improved energy efficient scheme for multi- sink WSN deployed in 3dimensional Cartesian plane	Dr. Rama Sushil	Ongoing
21	Richa Singhai	Development of Block Chain and Machine Learning Based Security Model for IOT Network	Dr. Rama Sushil	Ongoing
22	Vishakha Arya	Investigating artificial intelligence modelling of objective and subjective data following chiropractic care	Dr. Srabanti Maji	Ongoing

23	Abhay Narayan Tripathi	Predictive Modelling of Traffic follow prediction using machine learning techniques	Dr. Bharti Sharma	Ongoing
24	Manisha Verma	Road Accident Analysis and Prediction Models Using Data Mining Techniques	Dr. Bharti Sharma	Ongoing
25	Diwaker	Diagnosis of Breast Cancer through Classification of Histopathological Images	Dr. Kriti	Ongoing
26	Isha Bhardwaj	Analysis and classification of breast cancer images	Dr. Kriti	Ongoing
27	Mohit Saini	Predictions Model for Smart Agriculture using Clustering and Internet of Things (IoT)	Dr. Rakesh Kumar Saini	Ongoing
28	Latika Sharma	Computational learning based improved techniques for epileptic prediction	Dr. Srabanti Maji	Ongoing
29	Ashutosh Kumar	Secured Access of Cloud Based System	Dr. Garima Verma	Ongoing
30	Manik Chandra Pandey	Efficient virtual machine provisioning technique in a cloud computing environment	Dr. Pradeep Singh Rawat	Ongoing
31	Meghavi Rana	A framework for improving tumour diagnosis using ML techniques	Dr. Megha	Ongoing
32	Ruchi Sharma	Forensic analysis using advanced optimization techniques in IoT systems	Dr. Hemraj Saini	Ongoing
33	Sanjeev Sharma	A Nature Inspired Resource Allocation Approach in Cloud Environment	Dr. Pradeep S Rawat	Ongoing
34	Shabnam	Cancer detection using histopathological images based on artificial intelligence techniques	Dr. Kriti	Ongoing
35	Anushree Negi	An end-to-end disaster sensing system using internet of drones	Dr. Debopam Acharya	Ongoing
36	Ankit Maithani	Heart disease prediction using machine learning with swarm intelligence optimization techniques	Dr.Garima Verma	Ongoing
37	Kapil Dev Sharma	Enhanced cryptography techniques with chaotic-based systems along with their applications	Dr. Hemraj Saini	Ongoing
38	Preeti Gupta	Application of artificial intelligence based techniques for analysis of liver diseases	Dr. Kriti & Dr. Srabanti	Ongoing
39	Ravi Dhaundiyal	Efficient crop-weed discrimination using artificial intelligence	Dr. Megha	Ongoing
40	Ravi Shankar Jha	Optimized dynamic firewall: Advanced network traffic fingerprinting and solution to cold start problem	Dr. Hemraj Saini	Ongoing
41	Soumil Kumar Gupta	First RAC Due	Dr. Hemraj Saini	Ongoing

42	Sneh Lata Aswal	Doing Course Work	Doing Course Work	Doing Course Work
43	Sanjay Kumar	Doing Course Work	Doing Course Work	Doing Course Work
44	Sonu Pant	Doing Course Work	Doing Course Work	Doing Course Work

## FDP/FIP/FAP/SDP attended by faculty members

## FDP(Faculty Development Program)

S. No.	Faculty	Title	Organized by (Full Address)	Date (From –to)
1	Dr. Megha	Unleashing Emerging Research Trends and Advancements	School of Computer Science and Engineering, VIT-AP University, Amaravati	July 4th to July 14th, 2022.
2	Dr. Anuj Kumar Yadav	One Week online short-term course (FDP) on "Recent Trends in Information Security and Privacy	NIT Jalandhar	Nov 7-11, 2022
3	Dr. Srabanti Maji	Advanced Computing Approaches and their Implications in Industry and Academia,	KL University, Andhra Pradesh,	Oct 26-Nov, 2022
4	Ms. Navjot Saini	One-day National Workshop on "Quality System & Accreditation in Educational Institutions in India"	Regional Reference Standard Laboratory, Ahmedabad, India	08 Oct 2022

## FAP (Faculty Advancement Program)

S. No.	. Faculty	Title	Organized by (Full Address)	Date (From -to)
1	Ms. Anushree Negi	FEP on ANGULAR	INFOSYS	27 June -1 July 2022
2	Dr. Pradeep Singh Rawat	MOOC Course entitled "Machine Learning for All"	Coursera	11 Oct 2022.

# Conferences/Workshop/Seminars/ Webinars attended by faculty members

S. No.	Faculty	Title	Organized by (Full Address)	Date
1	Dr. Anil Kumar	IEEE Region 10 Symposium, (As a Session Chair)	IIT Bombay	1-3 July, 2022
2	Dr. Megha	Scientific Computing with MATLAB	Department of Mathematics, DIT University, Dehradun, Uttarakhand	11-15 July, 2022
3	Dr. Megha	Fifth International Conference on Smart Technologies In Data Science and Communication (SMARTDSC-2022), Springer (Technical program committee member)	Graz University of Technology, Graz, Austria	21-22 July, 2022

4	Dr. Megha	4th International Conference on Computer & Communication Technologies (IC3T), Springer (As a Technical review committee member)	Science, Warangal, Telangana, India	
5	Dr. Megha	Two Days Workshop on Robotics	School of computing, DIT University, Dehradun, India.	
6	Dr. Pradeep Singh Rawat	Two Days Workshop on Robotics	Days Workshop on Robotics School of computing, DIT University, Dehradun, India.	
7	Pooja Gupta	Two Days Workshop on Robotics	School of computing, DIT University, Dehradun, India.	1-2 August, 2022
8	Moumita Ghosh	Two Days Workshop on Robotics	School of computing, DIT University, Dehradun, India.	1-2 August, 2022
9	Dr. Megha	International Conference on Advances in Computer Engineering and Communication Systems (ICACECS2022) (As a Technical committee member)	VNR Vignana Jyothi Institute of Engineering and Technology	11-12 August, 2022
10	Dr. Megha	Software Product Line Conference (SPLC   Research group of the Institute of		13-16 September, 2022
11	Dr. Megha	Second International Conference on Computer Science, Engineering and Applications (IEEE ICCSEA - 2022) (As Advisory Committee member)  Department of CSE & CST, GIET University, Gunupur, India		8 September, 2022
12	Dr. Megha	2nd International Conference on Applied Mathematics and Computational Sciences-2022 (As Session Chair and Technical Secretary)	thematics and of Physical Sciences, DIT University, Onal Sciences-2022 Dehradun	
13	Dr. Megha	International Conference on Data Science and Computational Intelligence (ICDSCI-2022), (As member of national advisory committee)	ational Intelligence	
14	Dr. Megha	3rd International Conference on Computing, Analytics and Networks (ICAN2022), IEEE, (As a Technical Program Committee member)	Chitkara University, Punjab	18-19 November, 2022
15	Dr. Megha	5th International Conference on Information Systems and Management Science (ISMS 2022 (As Session chair)	Faculty of ICT, University of Malta	24-27 November 2022
16	Dr. Megha	1st International Conference on Innovations in Data Analytics (ICIDA 2022) (As a Technical Program Committee member)	Knowledge Research Foundation in collaboration with Eminent College of Management and 16Technology(ECMT), West Bengal	29-30 November, 2022

17	Dr. Megha	IEEE SOLI Virtual Conference, IEEE, December (As a Session chair)		
18	Dr. Megha	E-International Conference on Sustainable Computing and Smart Systems (ICSCSS-2023)	Hindusthan College of Engineering and Technology (HiCET) Coimbatore, India	14-16, June 2023
19	Dr. Megha	E-International Conference on Sustainable Computing and Smart Systems (ICSCSS-2023)  Hindusthan College of Engineering and Technology (HiCET) Coimbatore, India		14-16, June 2023
20	Dr. Megha	E-International Conference on Sustainable Computing and Smart Systems (ICSCSS-2023)	Hindusthan College of Engineering and Technology (HiCET) Coimbatore, India	14-16, June 2023

## Conferences/Workshop/Seminars/Webinars organized by the School

S.No.	Title	Convener /Organizing Secretary	Remarks (Sponsored by, in collaboration with, National/International level)
1	Two Days Workshop on Robotics	Advisory Committee: Dr. Debopam Acharya Dr. Rama Sushil  Organizing Committee Members: Dr. Megha, Ms. Meghavi Rana	Sponsored by, in collaboration with, National/International level): Organized by School of computing, DIT University, Dehradun, India.

## **Under Graduate Projects**

Total Number of Projects	Projects domains
	Artificial Intelligence & Machine Learning
131	Internet of Things
	Data Science and Analytics
	Web Application
	Security and Privacy
	Network & Mobile Computing
	Computer Vision and Biometrics

## **Patents**

S. No.	Name of Applicant/s	ne of Applicant/s Name of Inventor/s Title with name of patent agency		Status
1	Chandra Prakash	Prakash Chandra Prakash IoT Enabled Flood Monitoring System, Indian Patent published, Application No-202211035930A.		Published
2	Diwaker, Dr. Ashok Kumar, Anurag Shrivastava, Ankit Agarwal, Ankur Chaudhary, Gayatri Borgohain.	Diwaker, Dr. Ashok Kumar, Anurag Shrivastava, Ankit Agarwal, Ankur Chaudhary, Gayatri Borgohain.	Pressure-Controlled Cooking Device. Application No.: 202211062965	Published

3	Garima Verma	Garima Verma	Security in the Cloud with a Token- Based Authentication and Key Agreement Protocol, Application No202311008064	Published
4	Geetanjali Rathee & Hemraj Saini	Geetanjali Rathee & Hemraj Saini	Digital Pen for Real-Time Conversion of Handwriting to Editable Format, Patent/IP. Application No. 202311027760	
5	DIT University	Ena Jain & Debopam Acharya	Hyper-Local Pollution Modeling and Forecasting System for Sensitive Urban Areas Appliction No. 202311025834	Published
6	Dr. Megha & Dr. Srabanti Maji	Dr. Megha	Assistance Device for Visually Impaired Users, Application No.202311019740	Published
7	Dr. Megha	Dr. Megha	System for Cloudburst Event Forecasting Using Convolutional Neural Network (CNN) and Gramian Angular Field (GAF) Application No. 202311037799	
8	Dr. Ashok Kumar	Dr. Ashok Kumar	Smart Hive Monitoring Device" Application No. 202311027361	Published
9	Dr. Ashok Kumar	Dr. Ashok Kumar	Smart Irrigation System" Application No. 202311029256	Published
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## National/International Award/Recognition received by faculty members

S. No.	Name of Faculty Member	Name of Award/Recognition	Awarding Agency	Photograph
1	Dr. Pradeep Rawat	External Research Award (High-recognition)	International Society for Scientific Network, ISSN Awards, July, 2022	
2	Dr. Rakesh Kumar Saini	Substantial Awards for Leadership	IEEE International Conference on Big Data and Computational Intelligence organized by Department of Computer Science & Application at Kumaun University Nainital, Nov 2022  Fourth International Conference on Computing cyber security, organized by KEC, Ghaziabad, Dec, 2022  Advisory Board Members and Technical Program Committee Member, Dec, 2022.	

3	Ms. Moumita Ghosh	Best Academician Award	ECL-2022 on 18th Nov 2022 in TULA's Dehradun	
4	Dr. Anil Kumar	External Research Award (High recognition), 2022	Al and Blockchain Paradigms for the Changing World", in the IEEE Region 10 Symposium TENSYMP-2022,	
5	Ms. Pooja Gupta	Best Paper Award	International Conference on intelligent COMPUting TEchnologies and Research (i-COMPUTER – 2023) held from 24th-25st March 2023 at National Institute of Technology Puducherry.	
6	Dr. Garima Verma	Excellence in Research - 2022	DIT University, Dehradun, India	
7	Dr. Megha	Excellence in Research- 2022	DIT University, Dehradun, India	

## MOUs/Academic Collaboration

S. No	Name of	City/Country	Purpose	Dura	tion
<b>3</b>				Signed on	Valid till
1	Institutes/Industries Infosys	Bangalore- India	To enrich the technical education process and jointly work for enhancing the quality of education imparted to students of all the engineering disciplines in the field of Information technology	Nov-21	Nov-23

2	VIRTUSA CONSULTING SERVICES PRIVATE LIMITED	Chennai- India	For the purpose of enriching practical skills and imparting industry relevant course curriculum to students of all engineering disciplines in the field of Information Technology("IT"),has approached Virtusa with a proposal for forging an industry-institute academic alliance to facilitate and train the Partner's students and faculty on Full Stack and DevOps by utilizing the Virtusa's relevant experience and projects, and by deputing its technicians at the lab of DITU with the objectives of providing exposure to DITU's faculty and students to current industrial needs and requirements	August, 2022	Dec-23
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# **SCHOOL OF ENGINEERING AND TECHNOLOGY**

# List of Programmes

S. No.	Program offered	Year of establishment
1	Bachelor of Technology (B.Tech) in Civil Engineering	2009
2	M.Tech in Civil Engineering with specialization in Structural Engineering	2015
3	Ph. D. in Civil Engineering	2017
4	Diploma in Civil Engineering	2018
5	B.TechElectronics and Communication Engineering	1998
6	B.TechElectrical Engineering	1998
7	M.Tech. Electrical Engineering -Power System	2019
8	Ph.D Electronics and Communication Engineering	2014
9	Ph.D Electrical Engineering	2014
10	Dip- Electrical Engineering	2019
11	Dip- Electronics and Communication Engineering	2019
12	B.Tech in Mechanical Engineering	2013
13	B.Tech in Mechanical Engineering with Specialization in Automobiles	2016
14	B.Tech in Robotics & Automation Engineering	2021
15	M.Tech in Mechanical Engineering	2013
16	Ph.D. in Mechanical Engineering	2013
17	B.Tech in Petroleum Engineering	2011
18	Ph.D. in Petroleum Engineering	2011

## List of Faculty Members

S. No	Name of Faculty Member	Designation	Date of Joining	Specialization
		Civil Engineering		
1	Dr. B. K. Singh	Professor	17.07.2019	Structure
2	Dr. Tarumay Ghoshal	Associate Professor	14.07.2015	Environment
3	Ms. Dipika Keshri	Assistant Professor	14.07.2012	Geo-Tech
4	Dr. Rana Acharya	Assistant Professor	24.08.2020	Geo-Tech
5	Dr. Subhojit Roy	Assistant Professor	01.08.2022	Transportation Engineering
6	Mr. Himanshu Pratap Singh	Assistant Professor	21.01.2021	Water Resource

7	Dr. Shulanki Pal	Assistant Professor	02.03.2023	Structural Engg
8	Mr. Prakash Abhiram Singh	Assistant Professor	09.08.2023	Structural Engineering
9	Mr. Rohit Maheshwari	Assistant Professor	03.02.2022	Structure
	Elec	trical and Electronics & Commu	nication Engineer	ring
1	Dr. Nafees Ahamad	Associate Professor & Head	28-08-2002	Electrical Engineering
2	Dr. Gagan Singh	Professor	22-03-2000	Power Plant Instrumentation
3	Dr. Sonika Singh	Associate Professor	25-04-2000	Wireless Communication and Photonics
4	Dr. Gurjinder Singh	Associate Professor	24-07-2023	VLSI Design
5	Dr. Brajlata Chauhan	Assistant Professor & Associate NCC officer	22-09-2012	RF Microwave devices and Antenna
6	Dr. Mohamed Samir	Assistant Professor	28-10-2003	Power Systems
7	Mr. Vivek Kumar Gupta	Assistant Professor	01-08-2005	Digital Communication
8	Mr. Prabha Shanker Sharma	Assistant Professor & Deputy Registrar	16-12-2006	Digital Systems and Optical Fiber Communication
9	Dr. Dhruva Chaudhary	Assistant Professor	13-03-2010	Communication and Antenna
10	Dr. Kuldeep Choudhary	Assistant Professor & Deputy CoE	08-10-2012	Fiber-Optics Communication, Photonics Devices
11	Mr. Saurabh Mishra	Assistant Professor	01-11-2012	Electronic Circuit Designing, Wireless Sensor Network
12	Dr. Amrindra Pal	Assistant Professor	15-07-2013	Photonics
13	Dr. Saurabh Awasthi	Assistant Professor	03-07-2014	Electrical Engineering & Renewable Energy
14	Dr. Ankit Uniyal	Assistant Professor	08-09-2023	Electrical Engineering
15	Dr. Sandhya Prajapati	Assistant Professor	12-09-2023	Electrical Engineering
		Mechanical Enginee	ring	
1	Dr. Manoj Kumar	Professor	01/08/2005	Heat Transfer
2	Dr. Yogesh Kumar Tyagi	Professor & CoE	10/07/ 2010	Polymer Composite
3	Dr. Anil Kumar Patil	Associate Professor	11/03/2008	Heat Transfer and Thermal Engineering
4	Dr. Anshuman Das	Assistant Professor	12/02/ 2021	Design and Advanced Manufacturing
5	Dr. Subodh Kumar	Assistant Professor	17/07/2017	Welding
6	Dr. Jyoti Prakash Panda	Assistant Professor	16/07/02021	CFD

7	Dr. Pravesh Kumar	Assistant Professor	20/07/2021	Machine design, Robotics
8	Mr. Rajan Raman	Assistant Professor	18/10/1998	Materials, Automobiles, thermodynamics
9	Dr. Rajeev Pandey	Assistant Professor	23/10/2003	Thermal. Strength of Materials, Heat transfer, Solar thermal
10	Dr. Ravi Kumar	Assistant Professor	17/03/2004	Thermal Engineering and Power plant
11	Mr. Pankaj Singh Chandel	Assistant Professor	03/08/2007	Composite Materials
12	Dr. Bipin Kumar	Assistant Professor	11/10/2010	Thermal, Heat Transfer, Solar, Fluid Mechanics
13	Mr. Jai Prakash Agrawal	Assistant Professor	27/06/2016	Production
14	Dr. Nalin Somani	Assistant Professor	28/12/2016	Materials
15	Dr. Vivek Parmar	Assistant Professor	13/07/2021	Machine Design
16	Dr Nitin Kumar Gupta	Assistant Professor	04/10/2021	Robotics And Automation, Self- Healing materials
17	Mr. Rishabh Raj	Assistant Professor		High Temperature Alloy
		Petroleum Engir	neering	
1	Dr. Rakesh K. Pandey	Assistant Professor	17-09-2018	Petroleum Engineering
2	Dr. Gaurav Richhariya	Assistant Professor	11-07-2014	Petroleum Engineering
3	Mr. Gopal Kumar	Assistant Professor	11.07.2015	Petroleum Engineering
4	Ms. Richa Saxena	Assistant Professor	12-08-2022	Chemical Engineering

#### **List of Publications**

### **Civil Engineering**

#### **SCI/Scopus indexed Journals:**

- Maheshwari, R., Singh, B. K., & Marques, R. (2023). Seismic Performance of Confined Versus Unreinforced Masonry Buildings on Hilly Slopes Using Linear Static and Dynamic Analysis Approaches. Arabian Journal for Science and Engineering, (Published), SCIE indexed, Journal Paper, <a href="http://dx.doi.org/10.1007/s13369-023-08046-7">http://dx.doi.org/10.1007/s13369-023-08046-7</a>
- 2. Dipendraditya, K. & Singh, B. K. (2022). Performance of Bacillus Cohnii Added Microbial. Civil Engineering and Architecture, 11(1): 525–530. DOI: 10.13189/cea.2023.110141.
- 3. Acharyya, R., & Dey, A. (2023). Response of Skirted Strip Footing Resting on Layered Granular Soil Using 2-D Plane-Strain Finite Element Modeling. Geotechnical and Geological Engineering, 1-16. https://doi.org/10.1007/s10706-022-02373-6 [Q1 Journal]

#### **Papers in Conferences**

1. Subudhi, S. P., Kansal, A., Ghoshal, T., Singhal, N., & Rana, D. (2023, April). Recent Trends of Temporal and Spatial Variation in Waste Generation and Its Impacts on River Water Quality: Special Emphasis on Suswa and Song Rivers of Uttarakhand. In Advances in Waste Management: Proceedings of the International Conference on Advances and Innovations in Recycling Engineering (AIR–2021) (pp. 129–140). Singapore: Springer Nature Singapore

#### **Electrical and Electronics & Communication Engineering**

#### **SCI/Scopus indexed Journals:**

- 1. Ahamad, N., Sikander, A., & Singh, G. (2022). A novel reduction approach for linear system approximation. Circuits, Systems, and Signal Processing, 41(2), 700–724, DOI: 10.1007/s00034-021-01816-4. [Q2 Journal]
- 2. Chauhan, B., Gupta, S.C, Vijay, S. (2021), Guard lines conformal slotted antenna array for multiband application, International Journal of Informatics and Communication Technology (IJ-ICT), 10(2): 140–147, DOI: 10.11591/ijict.
- 3. Jain, S., Choudhary, K., & Kumar, S. (2022). Photonic crystal fiber-based SPR sensor for broad range of refractive index sensing applications. Optical Fiber Technology, 73, 103030, DOI: 10.1016/j.yofte.2022.103030.
- 4. Uniyal, S., Choudhary, K., Sachdev, S., & Kumar, S. (2022). Synthesis and characterization of gold nanoparticles and graphene oxide for the development of optical fiber biosensors. Applied Optics, 61(26), 7618-7624, DOI: 10.1364/AO.468734. [Q2 Journal]
- 5. Karki, B., Jha, A., Pal, A., & Srivastava, V. (2022). Sensitivity enhancement of refractive index-based surface plasmon resonance sensor for glucose detection. Optical and Quantum Electronics, 54(9), 1–13, DOI: 10.1007/s11082-022-04004-z. [Q2 Journal]
- 6. Nigam, P., Muduli, A., Sharma, S., & Pal, A. (2022). Self-quadplexing slot antenna for S and C-band applications. Computer Science and Information Technologies, 3(2), 74-81, DOI: 10.11591/csit.v3i2.pp74-81.
- Sharma, P. S., Choudhary, K., Gupta, V. K., & Kumar, S. (2022). Low-cost fabrication and characterization process for development of a sensitive optical fiber structure. Applied Optics, 61(27), 8057-8063, DOI: 10.1364/A0.470687. [Q2 Journal]

- 8. Saripalli, B. P., Singh, G., & Singh, S. (2022). Power Smoothing Approach to Control Solar Photovoltaic Output Power Fluctuations Using a Supercapacitor Storage System, 12(1):1569-1586. International Journal of Computing and Digital Systems. DOI: 10.12785/ijcds/1201127. [Q3 Journal]
- 9. Samir, M., & Singh, G. (2022). PI, PID and FOPID Controllers Analysis of Grid Connected Doubly Fed Induction Machine Optimized Using Meta Heuristic Algorithms. Journal of Electrical Engineering & Technology, 1-9. DOI: DOI: 10.1007/s42835-022-01323-9. [Q3 Journal]
- 10. Sikander, A., Dheeraj, A., Chatterjee, A., & Ahamad, N. (2022). Control design approach for improved voltage stability in microgrid energy storage system. Microsystem Technologies, 28(12), 2821–2828. DOI: 10.1109/TTE.2016.2638640. [Q2 Journal]
- 11. Uniyal, S., Choudhary, K., Sachdev, S., & Kumar, S. (2022). Design and performance analysis of plasmonic reflective codes in combinational circuits for high speed computing. Optical and Quantum Electronics, 54(12), 1-16. DOI: 10.1007/s11082-022-04211-8. [Q2 Journal]
- 12. Iruku, D. S., Singh, G., Ahamad, N., & Lairenlakpam, R. (2022, April). Classification Of Different Methods to Calculate State of Charge of Lithium-Ion Battery. In 2022 International Conference on Breakthrough in Heuristics and Reciprocation of Advanced Technologies (BHARAT) (pp. 172–177). IEEE.
- 13. Almawgani, A. H., Taya, S. A., Doghmosh, N., Pal, A., Alkanoo, A. A., Alhawari, A. R., ... & Upadhyay, A. (2023). A photonic crystal based on porous silicon as a chemical sensor for the detection of methanol compound. Indian Journal of Physics, 1–10. https://doi.org/10.1007/s12648-023-02665-4 [Q3 Journal].
- 14. Karki, B., Uniyal, A., Srivastava, G., & Pal, A. (2023). Black Phosphorous and Cytop Nanofilm-Based Long-Range SPR Sensor with Enhanced Quality Factor. Journal of Sensors, 2023. https://doi.org/10.1155/2023/2102915 [03 Journal].
- 15. Uniyal, A., Srivastava, G., Pal, A., Taya, S., & Muduli, A. (2023). Recent Advances in Optical Biosensors for Sensing Applications: a Review. Plasmonics, 1–16. https://doi.org/10.1007/s11468-023-01803-2 [Q3 Journal].
- 16. Uniyal, A., Pal, A., Srivastava, G., Rana, M. M., Taya, S. A., Sharma, A., ... & Rashed, A. N. Z. (2023). Surface plasmon resonance biosensor sensitivity improvement employing of 2D materials and BaTiO3 with bimetallic layers of silver. Journal of Materials Science: Materials in Electronics, 34(6), 466. https://doi.org/10.1007/s10854-023-09821-w [Ω2 Journal].
- 17. Uniyal, S., Choudhary, K., Raghuwanshi, S. K., Sachdev, S., & Kumar, S. (2023, March). Sensitive detection of vitamin C using etched SMS based LSPR biosensor. In Optical Fibers and Sensors for Medical Diagnostics, Treatment and Environmental Applications XXIII (Vol. 12372, pp. 139-146). SPIE. https://doi.org/10.1117/12.2648045 [Q4 Journal].
- 18. Subbanna, B. B., Choudhary, K., Singh, S., & Kumar, S. (2023). Design and performance analysis of optical sequence detector using lithium niobate-based Mach–Zehnder interferometers. Journal of Optical Communications, (0). https://doi.org/10.1515/joc-2022-0310 [Q3 Journal].
- 19. Awasthi, S., Singh, G., Ahamad, N. (2023). Identification of Type of a Fault in Distribution System Using Shallow Neural Network with Distributed Generation. Energy Engineering, 120(4), 811–829. https://doi.org/10.32604/ee.2023.026863 [Q4 Journal].
- 20. Awasthi, S., Singh, G., & Ahamad, N. (2023). Identification of type & location of a fault in a Distributed Generation System. International Journal of Computing and Digital Systems, 13(1), 1-1. https://journal.uob.edu.bh/handle/123456789/4861 [Q3 Journal]
- 21. Almawgani, A. H., Alhamss, D. N., Taya, S. A., Hindi, A. T., Upadhyay, A., Singh, S., ...Pal, A., ... &t Patel, S. K. (2023). Identification of four detrimental chemicals using square-core photonic crystal fiber in the regime of THz. Journal of Applied Physics, 133(24). https://doi.org/10.1063/5.0152927 [Q2 Journal]
- 22. Almawgani, A. H., Hussein, A. J., Taya, S. A., Hindi, A. T., Colak, I., Alqanoo, A. A., ... &t Pal, A. (2023). Using Hocker and Burns numerical method to analyze the dispersion properties of a planar waveguide with an exponentially graded-index core layer for s-polarized light. Journal of Physics A: Mathematical and Theoretical, 56(23), 235203. https://doi.org/10.1088/1751-8121/acd311 [Q2 Journal]

- 23. Taya, S. A., Daher, M. G., Almawgani, A. H., Hindi, A. T., Colak, I., Patel, S. K., & Pal, A. (2023). Absorption properties of a one-dimensional photonic crystal with a defect layer composed of a left-handed metamaterial and two monolayer graphene. physica status solidi (a). https://doi.org/10.1002/pssa.202300164 [Q3 Journal]
- 24. Gupta, V. K., Choudhary, K., & Kumar, S. (2023). 2D Materials-based Plasmonic Sensors for Health Monitoring Systems-A Review. IEEE Sensors Journal. https://doi.org/10.1109/JSEN.2023.3268175 [Q1 Journal]
- 25. Taya, S. A., Doghmosh, N., Almawgani, A. H., Hindi, A. T., Colak, I., Alqanoo, A. A., ... & Pal, A. (2023). Surface Plasmon Resonance Biosensor Based on STO and Graphene Sheets for Detecting Two Commonly Used Buffers: TRIS-Borate-EDTA and Dulbecco Phosphate Buffered Saline. Plasmonics, 1-9. https://doi.org/10.1007/s11468-023-01894-x [Q3 Journal]
- 26. Almawgani, A. H., Uniyal, A., Sarkar, P., Srivastava, G., Alzahrani, A., Taya, S. A., ... &t Pal, A. (2023). Creatinine Detection by Surface Plasmon Resonance Sensor Using Layers of Cerium Oxide and Graphene Over Conventional Kretschmann Configuration. Plasmonics, 1–10. https://doi.org/10.1007/s11468-023-01891-0 [Q3 Journal]
- 27. Saikumar, K., Arulanantham, D., Rajalakshmi, R., Prabu, R. T., Kumar, P. S., Vani, K. S., ... & Pal, A. (2023). Design and Development of Surface Plasmon Polariton Resonance Four-Element Triple-Band Multi-Input Multioutput Systems for LTE/5G Applications. Plasmonics, 1-10. https://doi.org/10.1007/s11468-023-01922-w [Q3 Journal]
- 28. Almawgani, A. H., Daher, M. G., Taya, S. A., Hindi, A. T., Colak, I., & Pal, A. (2023). Detection of blood cancer using highly sensitive surface plasmon resonance sensor based on MXene 2D nanomaterial. Diamond and Related Materials, 110142. https://doi.org/10.1016/j.diamond.2023.110142 [Q2 Journal]
- 29. Almawgani, A. H., Sarkar, P., Pal, A., Srivastava, G., Uniyal, A., Alhawari, A. R., & Muduli, A. (2023). Titanium disilicide, black phosphorus–based surface plasmon resonance sensor for dengue detection. Plasmonics, 1–10. https://doi.org/10.1007/s11468-023-01856-3 [Q3 Journal]
- 30. Ansari, G., Pal, A., Srivastava, A. K., & Verma, G. (2023). Detection of hemoglobin concentration in human blood samples using a zinc oxide nanowire and graphene layer heterostructure based refractive index biosensor. Optics & Laser Technology, 164, 109495. https://doi.org/10.1016/j.optlastec.2023.109495 [Q1 Journal]
- 31. Taya, S. A., Daher, M. G., Colak, I., Patel, S. K., Pal, A., Almawgani, A. H., & Ali, G. A. (2023). Highly sensitive sensor based on SPR nanostructure employing graphene and perovskite layers for the determination of blood hemoglobin concentration. Optik, 281, 170857. https://doi.org/10.1016/j.ijleo.2023.170857 [Q2 Journal]
- 32. Gupta, V. K., Choudhary, K., & Kumar, S. (2023). 2D Materials-based Plasmonic Sensors for Health Monitoring Systems-A Review. IEEE Sensors Journal. https://doi.org/10.1109/JSEN.2023.3268175. [Q1 Journal]

#### **Papers in Conferences**

- Kumari, S., Sreekumar, S., Singh, S., &t Kothari, D. P. (2022, May). Comparison Among ARIMA, ANN, and SVR Models for Wind Power Deviation Charge Reduction. In 2022 International Conference on Machine Learning, Big Data, Cloud and Parallel Computing (COM-IT-CON) (Vol. 1, pp. 551-557). IEEE, https://ieeexplore.ieee.org/abstract/document/9850913.
- 2. Choudhary, K., & Kumar, S. (2022). Design and analysis of an optical one to two data distributor using plasmonic waveguide-based Mach–Zehnder interferometers. In Proc. of SPIE Vol (Vol. 12323, pp. 1232307–1). https://doi.org/10.1117/12.2641839
- 3. Uniyal, S., Choudhary, K., Raghuwanshi, S. K., Sachdev, S., & Kumar, S. (2023, March). Etched MMF optical fiber based LMR biosensor for dopamine detection. In Optical Diagnostics and Sensing XXIII: Toward Point-of-Care Diagnostics (Vol. 12387, pp. 5–12). SPIE. https://doi.org/10.1117/12.2648140

- 4. Gupta, V. K., Choudhary, K., Raghuwanshi, S. K., & Kumar, S. (2023, March). Lossy mode resonance based single mode fiber structure for detection of ascorbic acid. In Frontiers in Biological Detection: From Nanosensors to Systems XV (Vol. 12397, pp. 30–37). SPIE. <a href="https://doi.org/10.1117/12.2648253">https://doi.org/10.1117/12.2648253</a>
- 5. Awasthi, S., & Singh, G. (2022). Cost Effective Analysis of a Stand-Alone Distributed Generation and Grid Connected Generation System. 13th International conference on recent trends in Information, Telecommunication and computing-ITC2022, 8(2).

#### **Mechanical Engineering**

#### **SCI/Scopus indexed Journals:**

- 1. Das, A., Das, S. R., Panda, J. P., Dey, A., Gajrani, K. K., Somani, N., & Gupta, N. K. (2022). Machine Learning-Based Modeling and Optimization In Hard Turning of AISI D6 Steel with Advanced Altisin-Coated Carbide Inserts to Predict Surface Roughness and Other Machining Characteristics. Surface Review and Letters, 2250137, D0I: 10.1142/S0218625X22501372[Q3 Journal]
- 2. Kumar, R., Kumar, M., & Patil, A. K. (2022). Exergetic performance analysis of energy storage unit fitted with wire coil inserts. Journal of Solar Energy Engineering, 145(2), 021003, DOI: 10.1115/1.4055074. [Q2 Journal]
- 3. Mahapatra, S., Das, A., Jena, P. C., & Das, S. R. (2022). Turning of hardened AISI H13 steel with recently developed S3P-AITiSiN coated carbide tool using MWCNT mixed nanofluid under minimum quantity lubrication. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 09544062221126357, DOI: 10.1177/09544062221126357. [Q2 Journal]
- 4. Panda, J. P., Kumar, B., Kumar, M., & Patil, A. K. (2022). Influence of twisted tape length on the thermal performance of a heat exchanger tube. Numerical Heat Transfer, Part A: Applications, 1–14, DOI: 10.1080/10407782.2022.2102341. [Q2 Journal]
- 5. Panda, J. P., Kumar, B., Patil, A. K., & Kumar, M. (2022). Machine learning assisted modeling of thermohydraulic correlations for heat exchangers with twisted tape inserts. arXiv preprint arXiv:2202.00927, DOI: 10.1007/s10409-022-22036-x. [Q2 Journal]
- 6. Singh, S., Kumar, M., & Patil, A. K. (2022). Effect of engraved concentric circles on pool boiling of water. Kerntechnik, DOI: 10.1515/kern-2022-0044. [Q4 Journal]
- 7. Nanan, K., Eiamsa-ard, S., Chokphoemphun, S., Kumar, M., Pimsarn, M., & Chuwattanakul, V. (2023). Influence of bed height and drying temperature on shrimp drying characteristics using a fluidized-bed dryer. Case Studies in Thermal Engineering, 103144. https://doi.org/10.1016/j.csite.2023.103144 [Q1 Journal]
- 8. Tiwari, A., Patil, A. K., & Kumar, M. (2023). Geometrical effects of pins in a center cleared heat sink on thermal management of electronic systems. Numerical Heat Transfer, Part A: Applications, 1-16. https://doi.org/10.1080/10407782.2023.2210257 [Q2 Journal]
- 9. Mishra, P. C., Roychoudhury, A., Banerjee, A., Saha, N., Das, S. R., & Das, A. (2023). Coated Piston Ring Pack and Cylinder Liner Elastodynamics in Correlation to Piston Subsystem Elastohydrodynamic: Through FEA Modelling. Lubricants, 11(5), 192. https://doi.org/10.3390/lubricants11050192 [Q1 Journal]
- 10. Maithani, R., Kumar, A., Kumar, M., & Sharma, S. (2022). Sustainability and Cost Effectiveness Analysis of Staggered Jet Impingement on Solar Thermal Collector. Energies, 15(19), 7345. DOI: 10.3390/en15197345. [Q1 Journal]
- 11. Gupta, N. K., Srivastava, V., & Somani, N. (2023). Self-healing materials: fabrication technique and applications—a critical review. International Journal on Interactive Design and Manufacturing (IJIDeM), 1-18. https://doi.org/10.1007/s12008-023-01283-y [Q2 Journal]

- 12. Somani, N., Tyagi, Y. K., Gupta, N. K., & Das, A. (2023). Characterization & Performance improvement of SiC Reinforced Cu Matrix Based Composites as Electrode for EDM machining. Surface Review and Letters. https://doi.org/10.1142/S0218625X23500269
- 13. Pandey, R. (2023). Effect of pitch and hole-hydraulic depth of perforated V-shaped baffles on the heat transfer and thermohydraulic performance of an air heater duct. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 09544089231157977. https://doi.org/10.1177/09544089231157977 [Ω2 Journal].
- 14. Jose, A. M., Kumar, M., & Patil, A. K. (2023). Enhanced heat transfer in corrugated plate fin heat sink. Kerntechnik, (0). https://doi.org/10.1515/kern-2022-0114 [Q4 Journal].
- 15. Patil, A. K., & Kumar, M. (2023). Techno-economic analysis of thermal energy storage systems. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 09576509231160318. https://doi.org/10.1177/09576509231160318 [Q2 Journal].
- 16. Padhan, S., Wagri, N. K., Dash, L., Das, A., Das, S. R., Rafighi, M., & Sharma, P. (2023). Investigation on Surface Integrity in Hard Turning of AISI 4140 Steel with SPPP-AITISIN Coated Carbide Insert under Nano-MQL. Lubricants, 11(2), 49. https://doi.org/10.3390/lubricants11020049 [Q1 Journal].
- 17. Gupta, N. K., Srivastava, V., & Somani, N. (2023). Self-healing materials: fabrication technique and applications—a critical review. International Journal on Interactive Design and Manufacturing (IJIDeM), 1–18. DOI: https://doi.org/10.1007/s12008-023-01283-y [Ω2 Journal]

#### Papers in Conferences

- 1. R. Kumar, A. K. Patil, M. Kumar, "Thermal Performance of Multiple Tube Sensible Energy Storage with Coil Inserts", Green Energy and Technology, pp. 61-66, 2023, 2-s2.0-85163380511.
- 2. N.K. Gupta, N. Somani, T. Panwar, N. Ranaa, F. Ahmeda, A. Dimri, "An Outlook on Self-Healing Materials", Lecture Notes in Mechanical Engineering, pp. 245–254, 2023. 2–s2.0–85144496869
- 3. S.R. Das, A. Das, "Study the Influences of Various Input Variables on Material Removal Rate During EDM Machining of Super Alloy Material", Lecture Notes in Mechanical Engineering, pp. 681-692, 2023. 2-s2.0-85141790869.
- 4. H. M. Vishwanatha, P. Kumar, A. Das, A. Agrawal, C. Satheesh Kumar, B.B. Verma, "Prediction of the Propagation of Fatigue Cracks for a Beam Specimen in Four-Point Bending Using CASCA and FRANC2D", Lecture Notes in Mechanical Engineering, pp. 301–306, 2023, 2–s2.0–85140472736.
- 5. A. Das, D. Barrenkala, K. Debnath, P. Kumar, R. Rajan, S. K. Patel, "Comparative assessments of machining forces in 3D printed polymer composite during milling operation using two coated carbide end mills" Materials Today: Proceedings, 62 (P10), pp. 6107–6114, 2022. 2–s2.0–85130349730.
- 6. R. Rajan, YK. Tyagi, A. Das, P. Kumar, S. Kumar Patel, "Development and analysis of friction characteristics of coir fibre added organic brake pad composite" Materials Today: Proceedings, 62 (P10), pp. 6077-6082, 2022. 2-s2.0-85130341598.
- 7. N. Somani, Y. K. Tyagi, P. Kumar, "Effect of Process Parameters on Machining of D2 Steel Using Taguchi Method", Lecture Notes in Mechanical Engineering, pp. 67–78, 2022. 2–s2.0–85113704291.
- 8. P.S. Chandel, N.K. Gupta, Y.K. Tyagi, K. Jha, "Experimental Investigation of Water Absorptions and Charpy Test of Epoxy Composite Immersed in Different Aqueous Medium", Lecture Notes in Mechanical Engineering, pp. 79–92, 2022. 2–s2.0–85113668490.

#### **Petroleum Engineering**

#### **SCI/Scopus indexed Journals:**

- 1. R. K. Pandey, A. Gandomkar, B. Vaferi, A. Kumar, and F. Torabi "Supervised deep learning-based paradigm to screen the enhanced oil recovery scenarios," Scientific Reports, vol. 13, 2023. doi: 10.1038/s41598-023-32187-2.
- 2. R. K. Pandey, A. Kumar, A. Mandal, and B. Vaferi, "Genetic algorithm optimization of deep structured classifier-predictor models for pressure transient analysis," Journal of Energy Resources Technology, vol. 145, no. 2, 2023. doi: 10.1115/1.4054896.
- 3. R. K. Pandey, S. Aggarwal, G. Nath, A. Kumar, and B. Vaferi, "Metaheuristic algorithm integrated neural networks for well-test analyses of petroleum reservoirs," Scientific Reports, vol. 12, 2022. doi: 10.1038/s41598-022-21075-w.
- 4. R. Purbey, H. Parijat, D. Agarwal, D. Mitra, R. Agarwal, R. K. Pandey, and A. K. Dahiya, "Machine learning and data mining assisted petroleum reservoir engineering: a comprehensive review," International Journal of Oil, Gas and Coal Technology, vol. 30, no. 4, 2022. doi: 10.1504/IJOGCT.2021.10043807.
- 5. Kumar, G., Dora, D.T.K. & Devarapu, S.R. Hydrophobicized cum amine-grafted robust cellulose-based aerogel for CO2 capture. Biomass Conv. Bioref. (2022). Doi: https://doi.org/10.1007/s13399-022-03346-8
- 6. Tapas Kumar Dora, Gopal Kumar, Vishesh Chaudhary, et al. Effects of Nanoparticles in Polymer-Based Enhanced Oil Recovery Technique.J. Nano- Electron. Phys. 14 No 6, 06009 (2022). doi: <a href="https://doi.org/10.21272/jnep.14(6).06009">https://doi.org/10.21272/jnep.14(6).06009</a>

#### **Papers in Conferences**

1. R. K. Pandey, A. Kumar, A. K. Sharma, R. K. Sharma, and H. H. C. Nguyen, "Effect of Genetic Algorithm in Optimizing Deep Structured Petroleum Reservoir Classifier," IEEE 7th International Conference on Computing, Communication and Security (ICCCS), Nov. 2022. doi: 10.1109/ICCCS55188.2022.10079293.

#### **List of Research Projects**

S. No.	Title of the Project	Project Investigator/s	Funding Agency	Amount (in INR)	Status
		Petroleum Enginee	ring		
1	Development of Acid Rain Resistant Cement Additives for Improved Structural Stability	Dr. Gaurav Richhariya & Dr. Tarumay Ghoshal	Seed Grant, DIT University Dehradun	132,000	Ongoing
	Electrical and E	lectronics & Commu	nication Enginee	ering	
1.	Development of LSPR based optical fiber sensors for biomedical applications	Dr. Kuldeep Choudhary	DITU	2.5 L	Ongoing
2	Development to achieve uniform circular polorization in designing a cavity backed spiral antenna (1-18 Ghz)	Dr Brajlata Chouhan	DITU	35 L	Under Review

3	Tunnel Detection Technology: Should be able to detect tunnels upto 10m.	Dr Amrindra Pal	DITU	33 L	Under Review
4. Study to provide seamless 5G NSA connectivity to pilgrims in disaster prone hilly terrain of Char Dham, Uttarakhand, India.";		Dr. Sonika Singh & Dr. Gagan Singh	DITU	37,75,350	Under Review
	,	Mechanical Enginee	ering		
1	Development and Performance Evaluation of a Solar Cooker with Different Phase Change Materials	Dr. Anil Kumar Patil	MNRE	13,20,000	Ongoing
2	Development of Hybrid thermal energy storage system for water heating";	Dr. Ravi Kumar & Dr. Manoj Kumar	UCOST	10,20,000	Under Review
3	Experimental Investigations on the Key Machinability Aspects of Metal 3D Printed Maraging Steel With and Without Heat - Treatment in Different Machining Regimes Using Various Coated Carbide Inserts	Dr. Anshuman Das & Dr. Jyoti Prakash Panda	Seed Grant, DIT University, Dehradun	326,000	Ongoing

## **Master's Thesis Submitted**

S. No.	Student	Title of Thesis	Supervisor (s)
		Civil Engineering	
1.	Rajat Pundir	Effect of saline environment on microbial concrete	Dr. B. K. Singh
2.	Vivek Singh Aswal	Machine learning to predict the properties of concrete	Dr. B. K. Singh
3.	Oasis Bidari	Effect of reinforcement corrosion over the bonding between reinforcement and concrete	Dr. B. K. Singh
4.	Sudeep Poudel	Characterization of diverse types of brick bond in structure	Mr. R. Maheswari
5.	Ankit Tiwari	Detailed vulnerability assessment of un- reinforced masonry structure	Mr. R. Maheswari
6.	Aman Shukla	Compressive strength of concrete with replacement of fine and coarse aggregate with waste material	Dr. Shulanki Pal
7.	Ganesh Phulara	Experimental Investigation of Retrofitting and Rehabilitation of Structure using short carbon fiber reinforced concrete	Dr. Shulanki Pal

8.	Mohd Faisal Hamid	Progressive Collapse Analysis of Performance Based Design of Structures in Severe Earthquake Zones	Mr. R. Maheswari
9.	Shreya Bhuresingh Saitya	Studies on the bond characteristics of microbial concrete with steel	Dr. B. K. Singh & Mr. Prakash A. Singh
	Electrical a	nd Electronics & Communication Engine	eering
1	Ayush Chauhan	Economic Analysis of Hybrid System With or Without Grid Connection	Dr. Gagan Singh
2	Nigarish Khan	Improving Fault Classification Accuracy in Power System Using Principal Component Analysis	Dr. Nafees Ahamad
3	Ranjeet Kumar	Modeling and Control of Hybrid DC	Dr.Parusharamulu Buduma

## **Ph.D Thesis Details**

S. No	Research Scholar	Title of Thesis	Supervisor (s)	Status
	Elect	trical and Electronics & Communicatio	n Engineering	
1	Mr. Mohd Samir	Performance Enhancement of Controller in Wind Turbine Power Generation Connected to Grid	Dr. Gagan Singh	Awarded
2	Mr. Saurabh Awasthi	Identification of Type and Location of a Fault in a Distributed Generation System	Dr. Gagan Singh	Awarded
3	Mr. Arun Uniyal	Design and Simulation of SPR Sensor for Biosensing Application	Dr. Amrindra Pal	Awarded
		Mechanical Engineering		
1.	S P Gairola	Fabrication and characterization of non- woven biodegradable composite with wood ash and banana fiber hybrid reinforced composite.	Dr Y K Tyagi	Awarded
2.	R Rajan	Investigations on the influence of blast furnace slag and coir fiber in brake friction composite materials on the performance properties	Dr Y K Tyagi	Awarded
3.	Pankaj singh chandel	Interlaminar fracture toughness in composites materials with crack developed between two dissimilar material ply	Dr Y K Tyagi	Awarded
4.	Mr J. P. Agarwal	Performance Evaluation of Copper based composite electrodes for powder mixed Electro Discharge Machining Process.	Dr. Nitin Kumar Gupta & Dr Nalin Somani	Ongoing
5.	Ms Sikha Pant	Experimental Investigations on Wire Arc Additively Manufactured Super Duplex Stainless Steel	Dr. Subodh Kumar	Ongoing

	Petroleum Engineering				
1.	Gopal Kumar	Development of Novel Material from Waste for various Engineering application	Dr. Tapas Kumar Dora, Dr. Gaurav Richhariya	Awarded	
2.	Rakesh Kumar Pandey	Optimized Deep Learning Implementation in Well Test Analysis	Dr. Anil Kumar	Awarded	
3.	Ankita Agarwal	Enhancement of CO2-EOR Performance using Predictive Analytics	Dr. Rakesh K. Pandey, Dr. Megha Bhushan	Ongoing	
4.	V V Shankar Anuprakash M	Performance Optimization of Hydraulically Fractured Reservoirs using Artificial Intelligence	Dr. Rakesh K. Pandey, Dr. Anil Kumar	Ongoing	

# FDP/FIP/FAP/SDP attended by faculty members FDP

S. No.	Faculty	Title	Organized by (Full Address)	Date
		Civil Eng	ineering	
1.	Mr. Rohit Maheshwari	Faculty Development (FDP)	IUCEE & DIT University	August, October & November 2022 T University
	Ele	ctrical and Electronics &	Communication Engineering	
1.	Dr. Saurabh Awasthi	Three days FDP on Data Science with Python	Three days FDP on Data Science with Python	12-14 June 2023
	,	Mechanical	Engineering	
1.	Dr. Subodh Kumar	Additive Manufacturing and 3D Printing (AM & 3DP)	Electronics and ICT Academies at IIT Roorkee, MNIT Jaipur, NIT Patna, and PDPM IIITDM Jabalpur	18-29 July, 2022
2	Dr Nitin Kumar Gupta	Advanced materials characterization technique (AMCT2022)	O P Jindal University, Raigarh	7-11 Nov 2022
		Mechanical	Engineering	
1.	Dr. Gaurav Richhariya	Hydrogen Energy: Production, storage, Transportation and Safety	NPTEL	July-October, 2022
2	Dr. Gopal Kumar	Hydrogen Energy: Production, storage, Transportation and Safety	NPTEL	July-October, 2022

## FAP

S. No.	Faculty	Title	Organized by	Date (From -to)
1	Dr. Gopal Kumar	Sustainable Nanotechnologies	GMR Institute of Technology, Rajam, Vizianagaram Andhra Pradesh, and NIT Warangal,	11-15 October, 2022

## Conferences/Workshop/Seminars/ Webinars attended by faculty members

S. No.	Faculty Title Organized by	Title	Organized By	Date
		Civil Engineering	]	
1	Mr. Rohit Maheshwari	Presented a Paper at The Conference on Recent Developments in Construction	MNNIT Allahabad	20th- 21st -Oct- 2022
2	Mr. Rohit Maheshwari	Problem and Project-Based Learning- A Case Study on Construction Planning & Management	Mini-Symposium organised, IUCEE	2nd-3rd-Dec-2022
	Electric	al and Electronics & Commu	nication Engineering	
1	Dr. Sonika Singh. Dr. Gagan Singh	Digital Communication: New Trends, Use Cases & Challenges	Telecom Regulatory Authority of India (TRAI)	8th Feb, 2023
2	Dr. Sonika Singh. Dr. Gagan Singh Dr. Kuldeep Chaudhary, Dr. Dhruv Chaudhary, Mr. Saurabh Mishra	State Level Youth Convention & Dedication ceremony of Maa Sarada Sevalya	Foundation of Ramakrishna Mission	28th March, 2023
3	Dr. Saurabh Awasthi	Hidden Challenges In E-Vehicle Technology	IETE Gyan Ganga Institute of Technology & Sciences	05 July 2022
4	Dr. Saurabh Awasthi	Test Challenges in integrated circuits	IETE Jabalpur	24 June 2023
	Electric	al and Electronics & Commu	nication Engineering	
1	Dr Ravi Kumar	International Conference on Advances in Energy Research	IIT Bombay	7-9 July, 2022
2	Dr Manoj Kumar	International Conference on Fluid Dynamics	Institute of Fluid Science Tohoku University	15 November, 2022
3	Dr Subodh Kumar	International Conference on Production and Industrial Engineering (CPIE-2023)	N.I.T. Jalandhar, Punjab, India.	10-12 March, 2023
4	Dr Vivek Parmar	International Conference on Production and Industrial Engineering (CPIE-2023)	N.I.T. Jalandhar, Punjab, India.	10-12 March, 2023
5	Dr Nitin Kumar Gupta	14th International conference on material processing and characterization (ICMPC2023)	GRIET Hyderabad, Telangana	24th – 26th March 2023

# Conferences/Workshop/Seminars/Webinars organized by the School

S. No.	Title	Convenor/ Organizing Secretary	Date	Remarks
	Electrical and Electrical	ronics & Communication Eng	jineering	•
1.	Conducted a seminar on GaN (Gallium Nitride) transistor designing for EV vehicle & design issues in PCB designing	Dr. Brajlata Chauhan	16th March 2023	DIT University
2.	Organized Guest lecture on Application of Al and Machine Learning in Industry 4.0'	Dr. Sonika Singh, Mr. Saurabh Mishra	30 Sept, 2022	DIT University
3.	Organized a workshop on "Arduino"	Mr. P S Sharma	28-30 Sept, 2023	DIT University IEEE Club DITU
	Pet	troleum Engineering		
1	Phase Change Materials	Dr. Gopal Kumar	23 March, 2023	DIT University
2	Industrial Waste Utilization	Dr. Gopal Kumar	23 March, 2023	DIT University
3	Oil & Gas Geophysical Exploration Method	Dr. Rakesh, K. Pandey	6-10 February, 2023	DIT University
4	Offshore Installations	Dr. Rakesh K. Pandey	28 February, 2023	DIT University

## **Under Graduate Projects**

Total Number of Projects	Projects domains			
Civil Engineering				
	Environmental Engineering			
	Structural Engineering			
10	Transportation Engineering			
.0	Water Resources Engineering			
	Geotechnical Engineering			
Electric	cal and Electronics & Communication Engineering			
	IOT Based Projects			
	Embedded Systems			
10	Power Systems			
	Non Renewables and Solar Energy			
Electric	eal and Electronics & Communication Engineering			
	Manufacturing			
21	Design			
	Thermal			
Petroleum Engineering				
	Well Integrity			
4	Enhanced Oil Recovery			
4	Oil Spill Control			
	Fly Ash			

# **Patents**

. No	Name of Applicant/s	Name of Inventor/s	Title with name of patent agency	Status		
Electrical and Electronics & Communication Engineering						
1.	Dr. Amrindra Pal	Dr. Amrindra Pal	System for Restricting Certain Activities of Unauthorised Devices and Method	Published		
2.	Dr. Amrindra Pal; Dr. Gaurav Dhiman	Dr. Amrindra Pal; Dr. Gaurav Dhiman	Computer mouse system for sensing health characteristics.	Published		
	Dr. Amrindra Pal; Dr. Gaurav Dhiman	Dr. Amrindra Pal; Dr. Gaurav Dhiman	Smart pollution monitoring system for automobile.	Published		
-	Dr. Amrindra Pal; Dr.Sanjiv Tomar	Dr. Amrindra Pal; Dr.Sanjiv Tomar	Surveillance camera systemfor suspicious activities tracking.	Published		
i	Dr. Amrindra Pal	Dr. Amrindra Pal	Personal protective equipment with integrated monitoring	Published		
j	Dr. Amrindra Pal; Dr. Ashish Jain	Dr. Amrindra Pal; Dr. Ashish Jain	Smart Safety Helmet.	Published		
,	Dr. Nafees Ahamad	Dr. Nafees Ahamad	Environment-friendly ai-based intelligent wastebin	Published		
1	Dr. Gagan Singh	Dr. Gagan Singh	Method for Removing Speckle Noise from Ultrasound Images for Diagnosis of Foetal Health	Filed		
)	Brajlata Chauhan	Brajlata Chauhan	Footwear Cleaning Device	Filed		
0	Brajlata Chauhan	Brajlata Chauhan	Accident Prevention and Detection System for Vehicle	Filed		
11	Dr. Sonika Singh	Dr. Sonika Singh	Supercapacitors Based Energy Storage System for Powering Household Devices in Remote Areas	Filed		
2	Dr. Gagan Singh	Dr. Gagan Singh	Supercapacitors Based Energy Storage System for Powering Household Devices in Remote Areas	Filed		
3	Dr. Sonika Singh	Dr. Sonika Singh	Method for Removing Speckle Noise from Ultrasound Images for Diagnosis of Foetal Health	Filed		
		Mechanic	al Engineering			
١.	Jai Prakash, Nalin Somani, Nitin Kumar Gupta	Jai Prakash, Nalin Somani, Nitin Kumar Gupta	Application No- 202311013159 Title- Self-healing 60PB40SN Reinforcement Al6061 Alloy Composite and Method For Fabrication Thereof Date 27/02/2023	Published		

# National/International Award/Recognition received by faculty members

S. No.	Name of Faculty Member	Name of Award	Awarding Agency	Photograph			
	Electrical and Electronics & Communication Engineering						
1.	Dr. Saurabh Awasthi	9th Venus International Faculty Awards (VIFA 2023)- Outstanding Faculty in Electrical Engineering	Venus International Foundation				
2.	Dr. Nafees Ahamad	Exemplary Leadership award 2021" on the Teachers Day 5th Sept. 2021.	DIT University				
		Petroleum Engineer	ring				
1.	Gopal Kumar	Certificate of Recognition     Best Paper award	Society of Petroleum Engineers (SPE International)      International Conference on Material for Energy Storage & Conservation- 2022, UPES, Dehradun				

# Foreign Visits for Scientific events

S. No	Name of Faculty Member	Name of Scientific event	In capacity	Organized by	Date
1.	Dr Manoj Kumar	International Conference on Fluid Dynamics	Conference attendee	Institute of Fluid Science Tohoku University	15 November, 2022

# MOUs/Academic Collaboration

S. No	Name of Institutes/Industries	City/Country	Purpose	Duration			
				Signed on	Valid till		
	Electrical and Electronics & Communication Engineering						
1.	Secure Meters Ltd	Jabalpur	Academic, Placement and Research	20th Feb, 2019	Valid for 5 Years		

Mechanical Engineering						
1	CSIR-IIP	Dehradun, India	To explore, extend and strengthen the functional relationship between the academic institutions, educational and scientific collaboration for mutual benefit for students internship, projects, sharing of testing facilities, Projects etc.	24 March 2017	Valid for 5 years	
2	CIPET	Dehradun	Academic & Research	9 October, 2020	9 October, 2025	
3	Indian Institute of Petroleum	Dehradun	Academic & Research	2 December 2022	2 December 2027	
		Petroleu	m Engineering		1	
1	Central institute of petrochemicals Engineering & Technology (CIPET-Dehradun)	Dehradun, India	To explore, extend and strengthen the functional relationship between the academic institutions, educational and scientific collaboration for mutual benefit for students internship, projects, sharing of testing facilities, M.Tech Projects etc.	09 Oct 2020	Valid for 5 years	