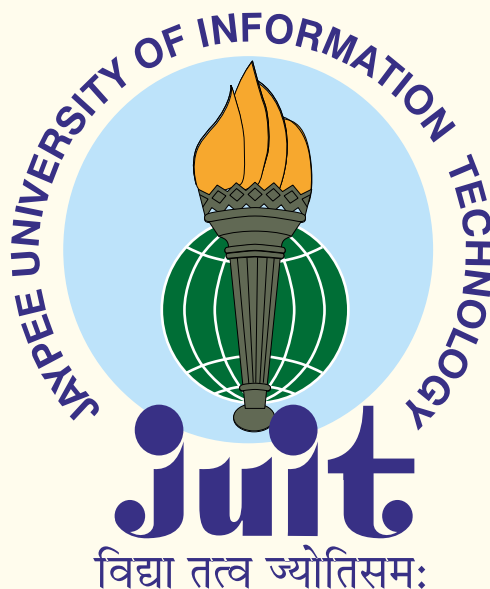


# **Jaypee University Of Information Technology**

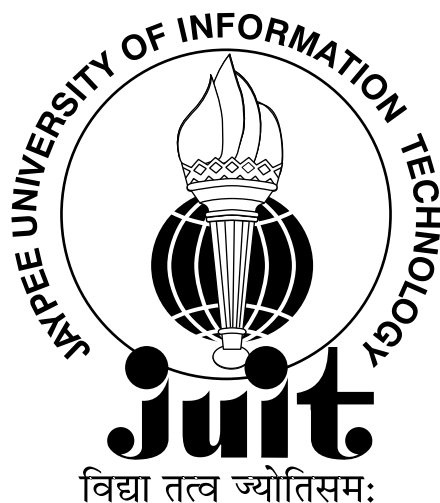
(Established by the H.P. Government Vide Act No. 14 of 2002)

**Waknaghat, Himachal Pradesh**



***Annual Report***  
**2021-2022**

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**WAKNAGHAT**  
**Himachal Pradesh**



**ANNUAL REPORT**  
**2021-2022**



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### **UNIVERSITY ESTABLISHMENT**

<b>Name</b>	:	<b>Jaypee University of Information Technology Waknaghat</b> (Established by H.P. State Legislature vide Act No. 14 of 2002 and approved by University Grants Commission vide its Notification No. F.9-10/2002(CPP-I) dated December 9, 2002)
Year of Establishment:	:	2002
Status	:	State Private University with effect from 23 May 2002
Location	:	Waknaghat, P.O. Waknaghat Tehsil – Kandaghat, Distt. Solan (H.P.)
Pin	:	173234
District	:	Solan
State	:	Himachal Pradesh
Chancellor	:	Shri Rajendra Vishwanath Arlekar Hon'ble Governor of Himachal Pradesh
Pro-Chancellor	:	Shri Manoj Gaur Executive Chairman, Jaiprakash Associates Ltd
Vice Chancellor	:	Prof. (Dr) Vinod Kumar (relieved the appointment of VC on 11 August 2021 (Afternoon)
	:	Prof. (Dr) Rajendra Kumar Sharma w.e.f. 11 August 2021 (Afternoon)
Registrar	:	Maj Gen Rakesh Bassi, SM (Retd)

### **Tele/Website**

Vice Chancellor	:	(O) 01792-239201 (R) 01792-239250
Registrar	:	(O) 01792-239203 (R) 01792-239272
EPBAX	:	01792-257999 (30 lines)
Website	:	<a href="http://www.juit.ac.in">www.juit.ac.in</a>

## **INTRODUCTION**

### **About Jaiprakash Sewa Sansthan (JSS)**

The Jaypee Group of Companies has consistently displayed full awareness of its social responsibilities through the Jaiprakash Sewa Sansthan (JSS), a '**not for profit**' trust registered under the Income Tax Act, 1961.

Four higher technical education campuses have been established in the emerging areas of technology – the Jaypee University of Information Technology (JUIT) at Waknaghat, Himachal Pradesh (July 2002), the Jaypee Institute of Information Technology (JIIT), Noida (August 2001), the Jaypee University of Engineering & Technology (JUET) at Guna, Madhya Pradesh (July 2003) and Jaypee University, Anoopshahr (July 2014).

### **Salient Features of the University**

#### **Genesis**

Set up by Act No. 14 of 2002 vide Extraordinary Gazette notification of Government of Himachal Pradesh dated May 23, 2002 and approved by the University Grants Commission under section 2(f) of the UGC Act, the sponsoring body of the University is Jaiprakash Sewa Sansthan (JSS).

The University commenced academic activities w.e.f. July 2002 with Undergraduate (UG) programmes for award of BTech degrees in Biotechnology, Bioinformatics, Computer Science & Engineering, Electronics & Communication Engineering, Information Technology and Civil Engineering. Post Graduate and Doctoral programmes leading to award of MTech and PhD degrees were added subsequently and are being conducted in the University.

#### **Vision**

To become a Center of Excellence in the field of IT & related emerging areas in education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

#### **Mission**

1. To develop as a benchmark University in emerging technologies.
2. To provide state-of-the-art teaching learning process and a stimulating R&D environment.
3. To harness human capital for sustainable competitive edge and social relevance.

## **Objectives of the University**

As provided for in the JUIT Act, the objectives of the University shall be to disseminate, create and advance knowledge, wisdom and understanding, and to offer technical education of the highest standards by teaching, research, training and extension activities.

## **Governance**

The JUIT is governed in accordance with the JUIT Act and the Statutes. The statutory bodies are as follows:-

### **Governing Council**

As per the Act of the University, the Governing Council is the supreme body of the University and its powers and functions shall be such as may be prescribed by the statutes. Responsibility for the general superintendence, direction and control of the affairs of the university is vested with the Governing Council. The composition of the Governing Council for the year 2021-22 is given at **Appendix-A**.

### **Executive Council and Finance Committee**

The Executive Council is responsible for the general management and administration of the University. The composition of Executive Council and Finance Committee for the year 2021-22 is at **Appendices-B and C**.

### **Academic Council**

The Academic Council is the premier and august body of the University, which decides and monitors the implementation of academic policies of the university. The powers and functions of the Council are defined in the University Act. Amongst other major functions, the Academic Council controls and approves the courses in various curricula, defines the thrust areas, objectives and constantly reviews the activities of the departments to ensure improvements in standards. The composition of the Academic Council for the year 2021-22 is listed at **Appendix-D**.

### **Meetings of Various Statutory Bodies:**

- |                     |                  |
|---------------------|------------------|
| • Academic Council  | 28 July 2021     |
| • Academic Council  | 29 November 2021 |
| • Executive Council | 28 July 2021     |
| • Executive Council | 29 November 2021 |
| • Finance Committee | 28 July 2021     |
| • Finance Committee | 29 November 2021 |

### **Location and Area of Land**

The University is located 3 km. off the Chandigarh-Shimla highway from Wagnaghat. Land measuring 114.01 bighas comprising Khasra No. 408/4 and 429/185 situated in Village Rachhiana, Tehsil Kandaghat, District Solan, H.P. has been allotted on lease by the Govt. of H.P. for JUIT.

### **Infrastructure**

JUIT has been developed as a modern world-class campus, with intellectually vibrant ambience in serene and lush green environment. The state of the art campus covers a total built up area of around 74,346.62 sqm. Smart buildings with internet and Wi-Fi connectivity, environmentally conditioned Academic Block, Annapurna (Mess), well-equipped modern laboratories, Learning Resource Centre, Faculty and student residences provide a pleasant and intellectually stimulating ambience for students in an eco-friendly environment. The details of the infrastructure are attached as **Appendix-E**.

### **Education System**

An academic year consists of two semesters. The education system is based on credit system along with continuous evaluation of students' performance. System provides flexibility in choice of courses of interest and to pursue the same at an optimum pace suited to student's ability and convenience. Each course is assigned certain number of credits depending upon the class contact hours. A specified number of credits, attainment of minimum CGPA and completion of Industrial Training satisfactorily are essential in order to qualify for a degree. The medium of instruction is English.

### **Accreditation**

The University has been accredited by the National Assessment and Accreditation Council twice. The first was in 2011 and the second time was in 2017. The NAAC accreditation is valid up to 29 October 2022 with B+ Grading.

The NIRF Ranking of the University is 138 among all Engineering Institutes in the country in the year 2021-22.

The Biotechnology undergraduate programme of the University was accredited by National Board of Accreditation (NBA) under Washington Accord up to 30<sup>th</sup> June 2022.

The University is approved by University Grants Commission under Section 2(f) of UGC Act 1956.

### **Visit of Regulatory Body**

The University was visited by Member HP Private Educational Institutions Regulatory Commission on 20 April 2022.

## **PROGRAMMES OF STUDY**

### **1. UG Programmes**

JUIT offers following Undergraduate programmes to award BTech degrees in the respective discipline during the year: -

- a) Bioinformatics
- b) Biotechnology
- c) Civil Engineering
- d) Computer Science & Engineering
- e) Information Technology
- f) Electronics & Communication Engineering
- g) Electronics & Computer Engineering

Industrial internship at the end of 6<sup>th</sup> Semester is an integral part of the academic program leading to overall development of the student through exposure to practical skills in real life situations.

The studies and examination of these BTech Programmes is on the basis of marks-cum-credit system and final evaluation by grading system. Each Academic year is divided in two semesters viz. Odd Semester (July to December) and Even Semester (January to June).

### **Admission**

1. The admissions to BTech programme is governed by the rules of the UGC/MHRD or any other competent authority of the Govt. of India and as notified in the Admission Brochure of the respective academic year.
2. The minimum academic qualification for admission to the programme is as laid down in the Admission Brochure.
3. Minimum qualification for admission to the first year BTech is qualifying the Senior Secondary School Certificate (10+2) Examination or an equivalent examination with Physics and Mathematics as compulsory subjects from CBSE or any other recognized Board.
4. Non-resident Indian (NRI) candidates shall also be eligible for admission in BTech in accordance with directives of the MHRD/UGC.
5. Admission in Biotechnology & Bioinformatics programme
  - a) Minimum qualification for admission is qualifying the Senior Secondary School Certificate (10+2) Examination or an equivalent examination with Physics and Biology/Biotechnology as compulsory subjects from CBSE or any other recognized Board.
  - b) A candidate with Mathematics and Biology/Biotechnology with Physics at 10+2 level is also eligible for admission to the programme.

6. A candidate who has qualified three year diploma programme/BE/BTech-1<sup>st</sup> year in related branch of engineering is eligible for admission to BTech – 2<sup>nd</sup> year through Lateral Entry. Minimum qualification for such Lateral Entry is as per the prevalent norms of the Govt. of India/UGC/MHRD or as approved in the Academic Council of the University.

## 2. **Post Graduate Programs**

JUIT offers Post Graduate Programs towards the award of MSc and MTech Degrees in following disciplines:-

### **MSc**

- a) Biotechnology
- b) Microbiology

### **MTech**

- a) Biotechnology
- b) Biotechnology (Industrial Biotechnology)
- c) Biotechnology (Medical Biotechnology)
- d) Civil Engineering (Construction Management)
- e) Civil Engineering (Environmental Engineering)
- f) Civil Engineering (Structural Engineering)
- g) Computer Science & Engineering
- h) Computer Science & Engineering (Information Security)
- i) Computer Science & Engineering (Data Science)
- j) Electronics & Communication Engineering
- k) Electronics & Communication Engineering – Internet of Things

#### a) **MSc (Biotechnology) & (Microbiology)**

One of the major objectives of MSc Biotechnology program is to generate human resource in the areas of basic and applied Biotechnology useful in industries and economical activities. The program is designed to impart skills in areas like Microbiology, Plant and Animal Tissue Culture, Molecular Biology, Recombinant DNA Techniques, Environment Biotechnology, Biomolecules, Bioprocess Technology, Basic Immunology Techniques and Clinical Diagnostics. The Department of Biotechnology, Govt. of India accepted JUIT proposal to fund this program (10 seats) for 2020-25.

### **Admission (MSc)**

1. The University offers regular fulltime MSc Program through classroom teaching.
2. Minimum qualification for applying to the first year MSc shall be Bachelor's Degree in the concerned subject or equivalent with at least 55% aggregate marks or its equivalent CGPA from any recognized University / Institution or any other qualification as per UGC norms of eligibility.
3. Admission shall be done in the University based on merit list prepared on the basis of marks / grades obtained in the qualifying degree.

4. The specific admission process and eligibility for admission to the MSc Program is available in the Admission Brochure of the respective year.

b) **MTech (Biotechnology), (Industrial Biotechnology) & (Medicinal Biotechnology)**

The Masters in Technology in Biotechnology is a broad program covering different aspects of life sciences such as gene technology, bioprocess technology, immune-technology, bio-separation, enzyme technology, protein engineering, metabolic engineering and process and plant design.

c) **MTech Civil Engineering with Specialisation in Construction Management**

This two year program aims to impart knowledge in areas like construction techniques, equipment, safety, planning; contracts, financial management, sustainable design; human resource management, affordable housing, value engineering and construction information systems through suitable core/compulsory & elective subjects and capstone projects and thesis work.

d) **MTech Civil Engineering with Specialization in Environmental Engineering**

The MTech programme in Environmental Engineering has been started from the academic session 2014-2015. The main objective of the program is to develop competent professionals including consultants, scientists, and technocrats in the field of environmental engineering having requisite skills to solve complicated and practical problems, develop effective communication skills and have the ability to work in multi-faceted and diverse groups. Beside elective subjects, the course has project work and thesis in the final year.

e) **MTech Civil Engineering with Specialization in Structural Engineering**

This two year program has been designed to provide knowledge in the areas like structural dynamics, design of tall buildings, repair and retrofitting of structures, modelling and simulation, bridge engineering, advance RCC and Steel design, FEM, etc. through suitable core/compulsory & elective subjects, projects in two parts and thesis work in the final year. The main objective of the programme is to prepare the students for working in structural design teams and if they wish, carry out research in the relevant fields.

f) **MTech (Computer Science & Engineering) & MTech (CSE with Specialization in Information Security) & MTech (CSE with Specialization in Data Science)**

This program offers a balanced emphasis on theoretical computer science, computer technology, software engineering, and applications of computing. The program provides advanced level education in areas like algorithms and data structures, software engineering, learning sciences and technology, high performance computer architecture, computer networking, network security, internet and web technologies, computer graphics, image processing, information systems, data warehousing & mining, data base management, operating systems, computational models, cognitive science, soft computing and human computer interaction.



g) **MTech (Electronics and Communication Engineering) & (Internet of Things)**

This program covers a number of areas like mobile, wireless, satellite, optical and computer communication systems and networks; signal processing, spread spectrum communication and error control coding techniques; microelectronics and VLSI design and information and communication theory through suitable core/compulsory and elective subjects and extensive project and thesis work. The program also focuses on developing analytical skills to enable fluent use of mathematical techniques as a tool for engineering research.

**Admission (MTech)**

1. The University offers regular full time MTech Programmes through classroom teaching.
2. Candidates who have a Bachelor degree in engineering or equivalent/Masters' degree or equivalent/possessing Associate Membership of professional bodies in the discipline of the degree are eligible for admission. The details of eligibility criteria for admission to specific MTech programme are included in the admission brochure.
3. Candidate admitted to the MTech programme may be awarded a University Fellowship whose duration, amount, and applicable conditions are detailed under the heading Fellowship for MTech students.
4. Candidates having valid GATE Score are exempted from (PGET) Post Graduate Entrance Test. However, Non-GATE candidates' admission is subject to meeting the qualified marks of PGET & performance in interview.
5. The specific admission process and eligibility for admission to the MTech Program is available in the Admission Brochure of the respective year.

3. **Doctor of Philosophy (PhD) Programs**

The University offers regular full time / part time PhD Programmes in following disciplines:

- a) Bioinformatics
- b) Biotechnology
- c) Civil Engineering
- d) Computer Science & Engineering
- e) Electronics & Communication Engineering
- f) Humanities & Social Sciences
- g) Mathematics
- h) Physics and Materials Science

The Scholars are required to take up intensive research work under the guidance of a Supervisor on a specific problem for a minimum of three years in this program. The academic programme leading to the PhD degree is broad-based and involves course credit requirements. The Scholars are required to deliver seminars on their research progress

regularly and publish their work. Finally, they are required to submit the thesis embodying their research findings for the award of PhD degree.

a) **PhD Biotechnology, Bioinformatics**

The department runs PhD program in biotechnology, bioinformatics and pharmaceutical sciences with a provision of fellowships @ Rs. 22,000/month to scholars so that the students are provided an opportunity to learn modern teaching skills while pursuing their research so as to enable them to become finest academicians and researchers. The Dept. has PhD scholars in different areas of biotechnology such as medical biotechnology, plant biotechnology, agriculture biotechnology, environmental biotechnology, food technology, industrial biotechnology, computational drug discovery, bioinformatics tools development, medicinal chemistry, neuropharmacology, pharmaceuticals, etc. The DRDO, DIHAR, Leh have registered their JRFs/SRFs in PhD through a MoU. Fifteen PhDs have been awarded by the Department and a few are in their final stages of Thesis writing and submission.

b) **PhD Civil Engineering**

The Department carries out research and development activities in the areas rock fill material modelling, constitutive modelling, FEM in geotechnical engineering, soil plasticity, slope stability problems (including seismic), soil-nailing, landfill design, fluvial hydraulics, scouring, flow of water around hydraulic structures such as bridge piers and abutments, concrete rheology, development of HPC with alcofine, micro-silica, etc., composite materials, prestressed concrete, dynamic analysis of structures subjected to extreme loading, and earthquakes, seismic evaluation of existing buildings, active and passive control of tall structures against earthquakes, smart structures, air pollution, estimation of NO<sub>x</sub> / co concentrations, solid-waste management and pavement materials.

c) **PhD Computer Science & Engineering**

The Department of Computer Science & Engineering promotes software, database, internet and information system technologies as well as network and distributed systems. Students are exposed to CASE tools, conceptual modeling, Requirements engineering and data warehouse design. They study all standard courses like data structures, object-oriented programming, operating systems, compilers, computer networks, etc. A special feature of our teaching is workshop courses where intensive practical experience is given on important tools like UNIX and Shell Programming, network programming, etc. Students are given courses in cutting edge technologies immediately relevant to industry, for example, web programming, web services, web application development, data mining, etc. Further they can opt for courses in futuristic technologies like Quantum Information Theory, Nano-Science & Technology.

Current research interests are in the areas of algorithms, computer graphics, computer network and security, database systems, data warehousing & data mining, digital image processing, internet technologies, learning science & technology and soft computing, parallel, distributed and grid computing, computer architecture, computer networks.

d) **PhD Electronics & Communication Engineering**

The Department of ECE offers PhD program in Electronics & Communication Engineering. The Department promotes strong exposure in the area of digital hardware design using VHDL, VLSI design, signal and speech processing, digital and data communication, data compression and error control coding, optical communication, satellite, wireless and mobile communication systems. Students are also exposed to core computer courses like data structures, object-oriented programming, operating systems and computer networks. Unique features of our department are designing electronic and communication systems using software tools such as MATLAB, PSPICE, Model-Sim and DSP kits.

e) **PhD Humanities and Social Sciences**

The Department was set up with the intention of producing well-rounded engineers, not only having good technological skills but also with the ability to interact with different organs of an organization. The Department develops 'soft' skills in group and co-operative working, economics, finance, project management etc. Additionally, the department exposes students to entrepreneurship skills, HR management, customer relationship management, total quality management etc.

f) **PhD Mathematics**

Departmental research interests are in applied group theoretic techniques, discrete symmetries, mathematical modeling and simulation, non-linear partial differential equations, linear algebra, numerical methods, operations research, differential geometry, wavelets and differential equations, Algebraic Coding Theory, sequence design, distributed source coding, fuzzy information measures, decision making, pattern recognition, Nonlinear Programming (Operations Research), Statistical Inference, Sampling Theory and Applied Statistics.

The Department of Mathematics was established from the very inception of the University mainly to cater the needs of BTech programs. The Department is well equipped with software like MATLAB, SPSS, Lingo and Lindo.

g) **PhD Physics & Materials Science**

The Department has strong research interests in nano-materials, microwaves and compound semiconductors. The Department has established five laboratories for the synthesis of nano-materials, thin film devices and characterizations. A microwave antenna laboratory has also been set up for fabrication and simulation of antennas. Research is being carried out with a number of doctoral students in the fields of nano-materials, semiconductors and microwave antennas.

The award of the PhD degree is in recognition of high academic achievements demonstrated by independent research and application of knowledge to the solution of technical and scientific problems. Creative and productive inquiry is the basic requirement underlying research work. The academic program leading to the degree involves fulfilling course credit requirements, residential requirements and a thesis giving a critical account of the research carried out, in any of the areas listed below.

Nano-structured semi-conducting thin films, electro-luminescent display devices, magnetic multi-layered thin films, ferrite based micro-strip antennas, opto-electronic materials, semi-conducting materials for microelectronic devices.

### **Admission**

#### **Minimum Qualifications:**

- 1) Regular (Not Distance Mode) MTech Degree of a University or equivalent for PhD in Engineering/Technology in respective branch with 60% aggregate Marks or CGPA not less than 6 on scale of 10.
- 2) Regular (Not Distance Mode) Master's Degree of a University for PhD in Sciences / Humanities / Social Sciences / Management in respective discipline or equivalent with 60% Aggregate marks or CGPA not less than 6 on scale of 10.
- 3) Consistently good academic record/performance with 1<sup>st</sup> division i.e. 60% aggregate marks or equivalent CGPA of not less than 6 on a scale of 10 at post graduate level for Scholars admitted after PG programs at (a) to (b) above.
- 4) Consistently good academic record / performance with 1<sup>st</sup> division with Distinction all through, i.e. 80% aggregate marks or equivalent CGPA of not less than 8.0 on a scale of 10 at undergraduate level for students from IIT's/NIT/IISER/IIT's.
- 5) Candidates having qualified UGC / CSIR NET / SLET are exempted from PhD Entrance Test. Non-NET / SLET candidates' admission is subject to meeting the marks requirement of PhD Entrance Test and performance in interview.
- 6) The specific admission process and eligibility for admission to the PhD Program is available in the Admission Brochure of the respective year.

## **ACADEMIC DEPARTMENTS**

### **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

#### **Department Vision and Mission**

- **Vision**

To be a creative driving force, within the university and worldwide, of the highest scholarly and entrepreneurial quality.

- **Mission**

**M1.** To provide a thorough grounding in electronics & communication engineering and computer engineering through investigative laboratory work and classroom lectures and field demonstrations.

**M2.** To promote the establishment of centres of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students.

**M3.** To discover and disseminate new findings from rigorous research that advances and improves the overall quality of life.

- **Faculty Details**

S No	Faculty	Qualification	Specializations
1	Rajiv Kumar	PhD	Fault-Tolerance, Network Reliability & Networked Control Systems
2	Samir Dev Gupta	PhD	Microwave Communication, Electronic Warfare, Avionics, Satellite, Planar and Conformal Microstrip Antennas
3	Shruti Jain	PhD	Bio Medical Signal Processing, VLSI Design
4	Emjee Puthooran	PhD	Medical Instrumentation and Signal Processing, Image Processing, Soft Computing Techniques
5	Harsh Sohal	PhD	VLSI Design, FPGA based Algorithm Implementation
6	Naveen Jaglan	PhD	Microwave Communication, Planar and Conformal Microstrip Antennas
7	Nafis Uddin Khan	PhD	Signal and Image Processing
8	Salman Raju	PhD	RF & Microwave Engineering, Digital Filter Design
9	Shweta Pandit	PhD	Cognitive Radio, Wireless Communication

10	Sunil Datt Sharma	PhD	Signal Processing & Applications
11	Nishant Jain	PhD	Biomedical Signal Processing, Image Processing
12	Vikas Baghel	PhD	Radar Signal Processing, Adaptive Signal Processing, Soft and Evolutionary Computing
13	Alok Kumar	PhD	Communication Systems, Cognitive Radio, Wireless Sensor Networks
14	Pradeep Garg	PhD	Genomic Signal Processing
15	Pragya Gupta	MTech	Communication Engineering, Image Processing
16	Munish Sood	MTech, MBA (HR)	Computer Vision, Deep Learning
17	Anuj Kumar Maurya	MTech	Microelectronics, CMOS technology, IC design and its fabrication and Digital logic design
18	Pankaj Kumar	MTech	Analog VLSI Design, Hybrid IC Technology, Solid state devices, Network and systems

- **Programs**

- **Undergraduate Programs**

The department offers a comprehensive BTech programme in Electronics and Communication Engineering which focuses on developing analytical skills to enable fluent use mathematical techniques as a potential tool for engineering research. The candidates are selected for admission to BTech through JEE. Students are also exposed to core computer courses like Data Structures, Object Oriented Programming, Operating Systems and Computer Networks. Unique features of our department are designing electronic and communication systems using software tools such as MATLAB, PSPICE, Model-Sim and DSP kits.

- **Laboratory Facilities**

Laboratory support for the lecture courses are provided by the following well equipped laboratories to the department. All the laboratories are equipped with state-of-the-art instruments and software tools to enable the students to perform design oriented experiments and test their designs. The infrastructure and lab facilities are upgraded from time to time and provide adequate opportunities for students and researchers to learn and innovate. Various softwares are available in the department like MATLAB, LABVIEW, PSPICE, XILINX VIVADO, ORCAD, and LabVIEW. For the enhancement of quality of Lab work, ECE department has also adopted Virtual Lab platform in most of the labs. This platform is also very helpful for conducting the experiments in an online mode.

- **Placement**

For the academic year 2021-22, there were 16 eligible participating students for placement and 13 students got placed in various companies like Infosys, Wipro, Cognizant, IBM, GreyB, BYJU'S, TCS etc. There were a total of 23 offers to these students.

- **New Courses introduced during the year**

Following new courses were introduced during the academic session 2020-21

S No	Title of New Course	Course Code
1	Automation and Robotics	20B1WEC731
2	Machine Learning for Wireless Communications	20B1WEC732
3	Signal Processing for Machine Learning	20B1WEC733
4	Digital Systems	20B1WEC734
5	Artificial Intelligence Techniques for Genomic Signal Processing	20B1WEC735
6	Image Sensing and Reconstruction	20B1WEC736
7	Renewable Energy Systems	21B1WEC732
8	Digital Image Processing using Python	21B1WEC731

- **Post Graduate Programs**

The department offers two MTech programmes in Electronics and Communication Engineering and Electronics and Communication Engineering with specialization in IoT. The candidates are selected based on the GATE score or an entrance test (PGET). The program covers a number of areas like next generation wireless systems, IoT architecture and protocols; Industrial automation; Robotics; Computer communication systems and networks; Signal and image processing; Machine learning for IoT; Microelectronics and VLSI Design; embedded system through suitable core/compulsory and elective subjects and extensive project and thesis work. The program also focuses on developing analytical skills to enable fluent use of mathematical techniques in engineering research.

- **PhD Program**

The Department of ECE offers PhD program in Electronics & Communication Engineering. The Department promotes strong exposure in the area of Digital Signal and Image Processing, Microwave Engineering, VLSI Design, Speech Processing, Digital and Data Communication, Wireless and Mobile Communication Systems, Automation, Robotics and Control.

- **PhD Completed**

Three students completed their PhD in the academic year 2021-22.

SNo	Name	Title of Thesis
1	Kanishka Katoch	Design And Development Of Frequency Selective Surface
2	Pardeep Garg	Detection And Localization Of Hidden Patterns In DNA Sequences Using Signal Processing
3	Ratish Kumar	Predictive Controller Based Delay Compensation Approaches in Networked Control System

- **PhD Enrolled**

For the academic year 2021-22, five new scholars enrolled in Ph.D. program.

SNo	Roll No.	Name
1	216001	Anupama Jamwal
2	216003	Shailly Kumari
3	216004	Vinay Negi
4	216005	Shalini Sharma
5	216006	Kanika Sandal

- **Lab Facilities**

- **New Labs**

Following new lab is established in the academic year 2021-22

**MITSUBISHI AUTOMATION LAB**

The department of ECE has signed a MoU with Mitsubishi Electric India Private Limited. Under this MoU, students will be trained in the area of Industrial Automation by the experts from Mitsubishi Electric India Private Limited. This will enable the students to acquire the skill set required for the industry 4.0.

- **Lab Staff with qualification**

S. No	Name	Qualification	Designation
1	Dr Ajay Kumar Singh	PhD	Sr. Lab Engineer



2	Dhirendra Kumar Singh	BTech	Sr. Lab Engineer
3	Jyotsna Bajaj	MTech	Sr. Lab Engineer
4	Pramod Kumar	BTech	Sr. Lab Engineer
5	Kamlesh Kumar Srivastava	B Sc, BTech	Lab Engineer
6	Shambhoo Nath	ITI Diploma in ECE	Lab Technician
7	Abhishek Ray	Diploma in ECE	Lab Assistant
8	Deep Narayan Tripathi	Diploma in ECE	Lab Assistant
9	Ghanshyam	Diploma in ECE	Lab Assistant

- **Patent Filed and Granted:**

S No	Title of Research Project	Members	Application No
1	A Method of Character Recognition In A Textual Document	S. V. Bhushan, V. Kumar, R. Khanna et al	Granted Patent No. : 369042
2	A multi-band EBG integrated wearable antenna	Naveen Jaglan, Satyender, Suman Dahiya, Sardul Singh Dhayal	Granted Patent No.: 2021106375

- **Conferences, Seminars and Workshops/Faculty development program**

**Conferences**

- **Conferences Organised**

Dates	Subject	Venue	Participation Faculty Name	Remarks
Oct. 07-09, 2021	Conference General Chair :6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21)	Jaypee University of Information Technology, Wagnaghat	Prof. Rajiv Kumar	
Oct. 07-09, 2021	Conference General Secretary: 6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21)	Jaypee University of Information Technology, Wagnaghat	Prof. Shruti Jain	

Oct. 07-09, 2021	Conference General Secretary : International 6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21)	Jaypee University of Information Technology, Wagnaghat	Dr. Harsh Sohal	
Oct. 07-09, 2021	Conference organizing committee members: International 6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21)	Jaypee University of Information Technology, Wagnaghat	All ECE faculty members	

- **Conferences Attended - NIL**

### **Workshops**

- **Workshops Organized**

Dates	Subject	Venue	Participation	Remarks
Every Saturday from 3rd July 2021 to 4th September 2021	Industrial revolution 4.0	Online, JUIT	<b>Coordinator</b> Dr. Vikas Baghel Dr. Nishant Jain Dr. Shweta Pandit	
7th November to 13th November 2021	Essay writing competition" on Women in Innovation and Engineering	IEEE WIE JUIT SB	Prof. Shruti Jain	
Oct 06-16, 2021	e-poster design", competition on My Vision of India 2025	ICC and Caste based Discrimination Committee, JUIT, Solan	Prof. Shruti Jain	
Nov 19-21, 2021	IEEE WIE event "Mindscape 2.0"	Online, JUIT	Prof. Shruti Jain	
Oct 8-10, 2021	IEEE Sight event "Revival SIGHT"	Online, JUIT	Prof. Shruti Jain	

Sept 11-12, 2021	Cyber security event Cyber Verse 2021	JUIT	Prof. Shruti Jain	
March 22-26, 2022	Image Processing with Deep Learning	Dept. of ECE and CSE/IT, JUIT	<b>Coordinator</b> Dr. Nishant Jain Dr. Emjee Puthooran	
March 25-27, 2022.	Technical Event "Murious 16".	In collaboration with IEEE student branch, JUIT and ACM, JUIT Solan.	Prof. Shruti Jain	
April 29 – May 1, 2022	Technical Event "R& D expo"	In collaboration with IEEE student branch, JUIT and ACM, JUIT Solan.	Prof. Shruti Jain	
2nd - 3rd May 2022	"Meraki - Put your heart and soul in what you do", to celebrate IEEE SIGHT Day 2022.	IEEE SIGHT JUIT Student branch, JUIT Solan.	Prof. Shruti Jain	

• **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
July 19-24, 2021	Recent Trends of Artificial Intelligence in Electronic Devices and Systems	JUITU Noida.	Pardeep Garg	1 week (19-07-21 to 24-07-21)
Oct. 25-29, 2021	Devices and Circuits for Next-Generation Computing	Govind Ballabh Pant Institute of Engineering & Technology, Pauri-Garhwal	Anuj Kumar Maurya	1 week (25-10-21 to 29-10-21)

Nov 15-19, 2021	VLSI Design Techniques and its Applications in AI/ML	Thapar Institute of Engineering & Technology, Patiala	Anuj Kumar Maurya	1 week (15-11-21 to 19-11-21)
Dec 13-17, 2021	Recent Advances and Challenges in Nanoelectronics Devices	IIIT Bhagalpur	Anuj Kumar Maurya	1 week (13-12-21 to 17-12-21)
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Department of CSE/IT at JUIT Waknaghat	Dr. Harsh Sohal	2 weeks (13-06-2022 to 24-06-2022)
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Department of CSE/IT at JUIT Waknaghat	Dr. Sunil Datt Sharma	2 weeks (13-06-2022 to 24-06-2022)
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Department of CSE/IT at JUIT Waknaghat	Dr. Shweta Pandit	2 weeks (13-06-2022 to 24-06-2022)
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Department of CSE/IT at JUIT Waknaghat	Dr. Pardeep Garg	2 weeks (13-06-2022 to 24-06-2022)
Oct 18-22, 2021	Sparse Signal Processing and its applications	NIT Andhra Pradesh	Dr. Vikas Baghel	1Week (04-10-21 to 08-10-21)

Dec 27-31,2021	Computational Techniques for Electromagnetics	Department of ECE, DTU India	Dr. Vikas Baghel	1 Week (18-10-21 to 22-10-21)
15-1-21	Learn Python one day		Dr. Sunil Datt Sharma	
27-12-21	Cloud Computing conducted simply learn one day		Dr. Sunil Datt Sharma	
15-1-21	Deep Learning - Image Recognition one day		Dr. Sunil Datt Sharma	
1 day	Introduction to Artificial Intelligence		Dr. Sunil Datt Sharma	
18-08-21	SIEMENS Technical Webinar SITRAIN	Jaypee University of Information Technology	Dr. Shweta Pandit	

• **Faculty Development Programs Attended**

Dates	Name	Organized by	No. of participants
July 19-24,2021	Recent Trends of Artificial Intelligence in Electronic Devices and Systems	ECE department of JIITU Noida.	Pardeep Garg
Oct 04-08,2021	Recent Trends and Advances in Photonic Integrated Circuits and Its Applications	UIT Shimla	Pardeep Garg

Oct. 25-29,2021	Devices and Circuits for Next-Generation Computing	Govind Ballabh Pant Institute of Engineering & Technology, Pauri-Garhwal	Anuj Kumar Maurya
Nov 15-19, 2021	VLSI Design Techniques and its Applications in AI/ML	Thapar Institute of Engineering & Technology, Patiala	Anuj Kumar Maurya
Dec 13-17,2021	Recent Advances and Challenges in Nanoelectronics Devices	IIIT Bhagalpur	Anuj Kumar Maurya
January 03-08,2022	Machine Learning Application in Signal Processing and Communication Engineering	jointly organized by Electronics and ICT Academies IIT Guwahati, NIT Patna, IIT Roorkee, MNIT Jaipur, IIIT Jabalpur, and NIT Warangal under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” by the MeitY, Government of India	Dr. Shweta Pandit
Oct 04-08,2021	Recent Trends and Advances in Photonic Integrated Circuits and Its Applications	UIT Shimla.	Dr. Shweta Pandit
Oct 04-08,2021	Recent Trends and Advances in Photonic Integrated Circuits and Its Applications	UIT Shimla.	Dr. Vikas Baghel
Oct 18-22,2021	Sparse Signal Processing and its applications	NIT Andhra Pradesh	Dr. Vikas Baghel
Dec 27-31,2021	Computational Techniques for Electromagnetics	Department of ECE, DTU India	Dr. Vikas Baghel
15 days(27 hours)	Neural network and deep learning	Coursera	Dr. Sunil Datt Sharma

5 days(9 hours)	Python programming course	LinkedIn	Dr. Sunil Datt Sharma
11 week course	Machine Learning	Coursera. Course offered by Stanford	Dr. Shweta Pandit
1 week (22-03-2022 to 26-03-2022)	Image Processing with Deep Learning	Department of ECE and CSE/IT at JUIT Waknaghat in hybrid mode	Dr. Pardeep Garg
1 week (09-05-2022 to 13-05-2022)	NEP 2020 Implementation in Higher Education Institutes	Department of Curriculum Development Centre of the National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh	Dr. Pardeep Garg
1 week (06-06-2022 to 11-06-2022)	Data Analytics and Its Research Perspectives	Department of CSE/IT at JUIT Waknaghat	Dr. Pardeep Garg
1 week (22-03-2022 to 26-03-2022)	Image Processing with Deep Learning	Department of ECE and CSE/IT at JUIT Waknaghat in hybrid mode	Dr. Sunil Datt Sharma
1 week (09-05-2022 to 13-05-2022)	NEP 2020 Implementation in Higher Education Institutes	Department of Curriculum Development Centre of the National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh	Dr. Sunil Datt Sharma
1 week (06-06-2022 to 11-06-2022)	Data Analytics and Its Research Perspectives	Department of CSE/IT at JUIT Waknaghat	Dr. Sunil Datt Sharma

1 week (09-05-2022 to 13-05-2022)	NEP 2020 Implementation in Higher Education Institutes	Department of Curriculum Development Centre of the National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh	Dr. Harsh Sohal
1 week (06-06-2022 to 11-06-2022)	Data Analytics and Its Research Perspectives	Department of CSE/IT at JUIT Waknaghat	Dr. Harsh Sohal
1 week (09-05-2022 to 13-05-2022)	NEP 2020 Implementation in Higher Education Institutes	Department of Curriculum Development Centre of the National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh	Dr. Shweta Pandit
1 week (06-06-2022 to 11-06-2022)	Data Analytics and Its Research Perspectives	Department of CSE/IT at JUIT Waknaghat	Dr. Shweta Pandit
1 weeks (21-02-2022 to 25-02-2022)	Cognitive speech processing	IIT Dharwad & supported by Govt. of India Under GIAN course	Dr. Sunil Datt Sharma

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Harsh Sohal, Shruti Jain	FPGA implementation of collateral and sequence pre-processing modules for low power ECG denoising module	Informatics in Medicine Unlocked	28 ,100838	



Nafis Uddin Khan and Sunil Datt Sharma,	A Review on Performance Analysis of PDS based Anisotropic Diffusion Approaches for Image Enhancement	Informatica:- An International Journal of Computing Informatics	Volume 45(6), pp. 89 – 102, ISSN: 0350-5596	
Pardeep Garg, and Sunil Datt Sharma	CpG Islands detection in Human DNA Sequences using Wavelet Transform	International Journal of Computing and Digital System.		
Sunil Datt Sharma.	Performance analysis of pre-trained transfer learning models for the classification of the rolling bearing faults.	In Journal of Physics: Conference Series	vol. 2070, no. 1, p. 012141. IOP Publishing,	
Garg, Pardeep, and Sunil Datt Sharma.	Modified p-spectrum-based approach to enhance sensitivity for the detection of CpG Islands in the DNA sequences.	Biomedical Engineering: Applications, Basis and Communications	2150052.	
Nafis Uddin Khan and Sunil Datt Sharma,	A Review on Performance Analysis of PDS based Anisotropic Diffusion Approaches for Image Enhancement	Informatica:- An International Journal of Computing Informatics	Volume 45(6), pp. 89 – 102, ISSN: 0350-5596	
Jaglan, N. & Gupta, S. D.	Side Edge Printed Eight-element Compact MIMO Antenna Array for 5G Smartphone Applications.	Journal of Electromagnetic Waves and Applications,	pp. 1-17	

A. Kumar, S. Pandit	HSA-SPC:- Hybrid spectrum access with spectrum prediction and cooperation for performance enhancement of multiuser cognitive radio network	Computer Networks,	<a href="https://doi.org/10.1016/j.comnet.2021.108596">https://doi.org/10.1016/j.comnet.2021.108596</a> .	(SCI, IF=4.474)
A. Kumar, S. Pandit	Optimization of Fusion Center Parameters with Threshold Selection in Multiple Antenna and Censoring based Cognitive Radio Network.	IEEE Sensors Journal	Vol. 22, no. 5, 4709-4721	(SCI, IF=3.301)
R. Kumar and N. Sharma	Proactive connection recovery strategy with recovery time constraint for survivable elastic optical networks, in China Communications	China Communications,	vol. 18, no. 9, pp. 236-248.	
Rajiv Kumar	Risk-aware optimized quickest path computing technique for critical routing services. Computers and Electrical Engineering	Computers and Electrical Engineering,	95 (6), 107436-107436	IF: 3.818
Nishant Jain	Analysis of Discrete Wavelet Transforms Variants for the Fusion of CT and MRI Images	The Open Biomedical Engineering Journal	204-212.	
Shruti Jain	A review of various image fusion types and transform	Indonesian Journal of Electrical Engineering and Computer Science	Vol. 24, No. 3, pp. 1515-1522	

Shruti Jain	Design and development of smart monitoring module for detection of virus	Measurement: Sensors		
H. Sohal and S. Jain	FPGA implementation of collateral and sequence pre-processing modules for low power ECG denoising module	Informatics in Medicine Unlocked	100838	
Shruti Jain, Meenakshi Sood	Deep Learning based Diabetic Retinopathy Severity Grading System Employing Quadrant Ensemble Model	Journal of Digital Imaging		
Shruti Jain	An Ameliorated Harris Hawks Optimizer for Designing of Low-Power Signed Floating-point MAC Architecture	Neural Computing and Applications,		
Shruti Jain, Meenakshi Sood,	Two-Tier Grading System for NPDR Severities of Diabetic Retinopathy in Retinal Fundus Images,	Recent Patents on Engineering, Bentham Science,	15(2), pp 195-206.	
Shruti Jain, Meenakshi Sood,	Performance analysis of retinal features for diabetic retinopathy characterization and diagnosis	International Journal of Business and Systems Research	15(2), pp 253-270.	

Shruti Jain, Harsh Sohal	An innovative interconnect structure with improved Elmore delay estimation model for deep submicron technology	Analog Integr Circ Sig Process		
Shruti Jain	Fuzzy System Design Using Current Amplifier for 20nm CMOS Technology	CMC- Computers, Materials & Continua	72 (1), 1815-1829	
Shruti Jain	A review of various image fusion types and transform,	Indonesian Journal of Electrical Engineering and Computer Science	Vol. 24, No. pp. 1515-1522	
Shruti Jain	Classification of Multimodal Brain Images employing a novel Ridgempirical Transform	NeuroQuantology	20(6):2871-2882	
Nafis Uddin Khan and Sunil Datt Sharma	An Efficient Fuzzy Inference System based Approximated Anisotropic Diffusion for Image De-noising	Cluster Computing	DOI:- 10.1007/s10586-022-03642-y	
Harsh Sohal, Shruti Jain	Low-power Approximate Arithmetic Circuits for IoT devices.	Recent Advances in Electrical and Electronic Engineering	vol. 15	
Shruti Jain	A Non-Invasive IoT-Based Glucose Level Monitoring System.	Current Signal Transduction Therapy	vol. 17	

Shruti Jain	Computational Model for Prediction of Foxo Protein Employing Ensemble Learning Algorithm	Current Signal Transduction Therapy	vol. 17	
Shruti Jain	Computational Model for Prediction of Foxo Protein Employing Ensemble Learning Algorithm.	Current Signal Transduction Therapy	vol. 17	
Shruti Jain	Classification of Multimodal Brain Images employing a novel Ridgempirical Transform.	NeuroQuantology	vol. 20, no. 6, pp. 2871-2882	

• **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Prof. Rajiv Kumar, Prof. Shruti Jain, Dr. Harsh Sohal		Signal Processing, Computing and Control(6th)	[ISBN : 978-1-6654-2554-4]	USA: IEEE
Prof. Shruti Jain		Emerging Convergent Technologies and Biological Systems, Lecture Notes in Electrical Engineering	ISSN1876-1100, ISBN - 978-981-16-8773-0	

Prof. Shruti Jain		Paradigms in Computational Intelligence and Data Sciences	ISBN :9781032123134	CRC, Taylor & Francis Group, U.K.
Prof. Shruti Jain		Assistive Technology Intervention in Healthcare	ISBN : 9781032075976	CRC, Taylor & Francis Group, U.K.
Prof. Shruti Jain		Smart Computational Intelligence in Biomedical and Health Informatics	ISBN 9780367624125	CRC, Taylor & Francis Group, U.K.
Prof. Shruti Jain		Proceedings of MRCN 2021, Lecture Notes in Networks and Systems,	Series ISSN 2367-3370, ISBN – 978-981-16-7017-6	
Prof. Shruti Jain, Dr. Harsh Sohal	FPGA Implementation of Low Power Pre-processor Design for Biomedical Signal Processing Application.	Computational and Experimental Methods in Mechanical Engineering, Smart Innovation, Systems and Technologies	Vol 239, pp 489-497.	Springer, Singapore
Prof. Shruti Jain	Speech Recognition Employing MFCC and Dynamic Time Warping Algorithm.	Innovations in Information and Communication Technologies (IICT), Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development)	pp 235-242.	Springer, Cham,

Prof. Shruti Jain	Computer-Aided Diagnostic System for Diabetic Retinopathy Using Convolutional Neural Network.	Innovations in Information and Communication Technologies (IICT-2020), Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development).	pp 219-226. <a href="https://doi.org/10.1007/978-3-030-66218-9_25">https://doi.org/10.1007/978-3-030-66218-9_25</a>	Springer, Cham,
Prof. Shruti Jain	Realization of Carry-Free Adder Circuit Using FPGA.	Computational Intelligence in Healthcare	pp 53-66	
Dr. Sunil Datt Sharma	Transfer Learning-Based Model for Rolling Bearing Fault Classification Using CWT-Based Scalograms.	Proceedings of Third International Conference on Intelligent Computing, Information and Control Systems.		Springer, Singapore,
Prof. Shruti Jain	A Robust System for Detection of Pneumonia Using Transfer Learning.	Mobile Radio Communications and 5G Networks, Lecture Notes in Networks and Systems.	Vol 339, pp-667-678.	Springer, Singapore,
Prof. Shruti Jain	Importance of Pulse Examination and Its Diagnostic System. In: Singh P.K., Singh Y., Kolekar M.H., Kar A.K., Gonçalves P.J.S. (eds) Recent Innovations in Computing.	Lecture Notes in Electrical Engineering.	Vol 832, pp 189-199.	Springer, Singapore
Prof. Shruti Jain	A Computational Model for Detection of Lung Diseases Due to Forkhead Transcription Factors.	Emergent Converging Technologies and Biomedical Systems, Lecture Notes in Electrical Engineering,	Vol 841, pp 71-81.	Springer, Singapore

Dr. Nafis U Khan	Brain Tumor Segmentation using k-Means and Fuzzy C-Means Clustering	Accepted in Digital Image Enhancement and Reconstruction, Elsevier,		
Dr. Shweta Pandit, Dr. Alok Kumar	Cognitive radio-medium access control protocol for Internet of Multimedia Things (IoMT)	Internet of Multimedia Things (IoMT)	Pages 67-98, ISBN 9780323858458	Elsevier, Academic Press

• **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Dr Harsh Sohal	Design of Global Interconnects using Adiabatic Dynamic Logic employing FinFET Technology.	Proceedings of the International Conference on Signal Processing, Computing and Control , [6th : Wagnaghat Solan	pp.450-455.	October 07-09, 2021
Dr Harsh Sohal	Implementation of Approximate Multiplier using Inexact Compressors	Proceedings of the International Conference on Signal Processing, Computing and Control [6th : Wagnaghat	pp.165-170	October 07-09, 2021
Dr Harsh Sohal	FPGA-Based Parallel Prefix Speculative Adder for Fast Computation Application	Proceedings of the	pp.206-210	November 06-08, 2020
Dr. Nishant Jain	Design and Analysis of Smart Shoe for Women Safety in Different Terrain	6th International Conference on Signal Processing, Computing and Control (ISPCC) , JUIT	556-560.	2021
Prof. Rajiv Kumar	Various Heuristic Fault Tolerance Routing Protocols and Factors in IoT Wireless Sensor Network.	Proceedings of the IEEE International Conference on Signal Processing, Computing and Control (ISPCC) , JUIT	pp.701 -707	7-9 Oct. 2021



Prof. Shruti Jain	Hardware Simulation of BRAM Digital FIR filter for Noise Removal of ECG Signal	2021 International Conference on Signal Processing, Information, Communication and Systems (SPICSCON), Dhaka Bangladesh		Dec 3-5, 2021.
Prof. Shruti Jain	Multimodal Image Fusion Employing Discrete Cosine Transform	IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), Dhaka Bangladesh,		Dec 3-5, 2021
Prof. Shruti Jain	Design of proposed H-model for Long Wire Interconnects	IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), Dhaka Bangladesh,		Dec 3-5, 2021.
Dr. Harsh Sohal, Prof. Shruti Jain	Design of Buffer Circuit for Global Interconnects Using Adiabatic Dynamic Logic	7th International Conference on Signal Processing and Communication (ICSC)	pp. 311-315	November 25-27, 2021
Prof. Shruti Jain	Detection of Cones for Different Color Visual Impairment	6th International Conference on Image Information Processing	pp. 7-12	November 26 - 28, 2021
Prof. Shruti Jain	Design of Multi Chain Power Efficient Gathering for Sensor Information System Using Sink Mobility,	6th International Conference on Image Information Processing	pp. 81-86, doi: 10.1109/ICII P53038.2021.9702634	November 26 - 28, 2021
Prof. Shruti Jain	Implementation of Approximate Multiplier using Inexact Compressors	6th International Conference on Signal Processing, Computing and Control (ISPCC2K21)	pp 165-170	October 07-09, 2021
Prof. Shruti Jain	Design of Global Interconnects using Adiabatic Dynamic Logic employing FinFET Technology,	6th International Conference on Signal Processing, Computing and Control (ISPCC2K21)	Pp450-455.	October 07-09, 2021

Prof. Shruti Jain	Diagnostic System for Detection of Diabetic Retinopathy Severity Diseases	IEEE International Conference on Biomedical Engineering, Computer and Information Technology for Health (BECITHCON), Dhaka Bangladesh		Dec 3-5, 2021.
Prof. Shruti Jain	Determination of Risk Prediction Using Random Forest Technique for Breast Cancer	Maiden edition of IEEE Delhi Section International Conference on Electrical, Electronics and Computer Engineering (DELCON 2022)		February 11-13, 2022
Prof. Shruti Jain	Data Envelopment Analysis Based Efficiency Measurement of Urban Cooperative Banks	Maiden edition of IEEE Delhi Section International Conference on Electrical, Electronics and Computer Engineering (DELCON 2022)		February 11-13, 2022
Prof. Shruti Jain	Evaluation of Correntropy Features for Normal/Glaucoma Images Employing Ridgelet Empirical Wavelet Transform	Maiden edition of IEEE Delhi Section International Conference on Electrical, Electronics and Computer Engineering (DELCON 2022)		February 11-13, 2022
S. Pandit, and S. Talluri	Comparative Study to Classify and Predict the Throughput of Fifth Generation Wireless Technology Using Supervised Machine Learning Algorithms	Proc. of 6th International Conference on Image Information Processing, India.	pp. 288-292	26-28 Nov. 2021

Shruti Jain	Trends of Accuracy on Diabetic Retinopathy Considering Epoch Error. :], pp.-... Google Citation	Proceedings of the 2021 IEEE International Conference on Computing, Power and Communication Technologies (GUCON) [Connexion Conference & Event Centre - CCEC, 7, Jalan Kerinchi, Bangsar South, 59200 Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur, Malaysia	September 24-26, 2021
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- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Flt Lt Kishore (Retired)	Director, Vidhya Sangha Technologies Pvt Ltd	Project funding opportunities	Feb 12, 2022
Dr(Mrs) Gayatri Phade	Associate Prof. & HOD (E&TC) Sandip Foundation's SITRC, Nashik	Project funding opportunities	Feb 12, 2022
Mr Utkarsh Srivastava	Acalvio Technologies, Bengaluru	Advanced Robotics and Automation	Aug. 7, 2021
Mr Sanjay Singh	Project Manager, Infosys Ltd.	Cloud computing Overview – Key to the success of Industry 4.0	Sept. 4, 2021
Mr Sanjay Singh	Engineering Manager, British Telecom	Bridging the gap between Academic and Industry	June 11, 2022
Dr Anita Singh	DRDO, Govt. of India	Application of AI and image processing for defence systems	March 25, 2022

Dr Chandresh Kumar Maurya	Asst. Prof., Dept. of CSE, IIT Indore	Automatic radiology report generation using deep learning	March 25, 2022
Dr Jitender Virmani	Senior Technical Officer, ISTC, CSIR-CSIO	Feature extraction and classification of liver ultrasound images	March 24, 2022
Dr Narendra D. Londhe	Assoc. Prof., Electrical Engg. Dept., NIT Raipur	Application of deep learning networks on medical images	March 23, 2022
Dr Subrahmanyam Murala	Associate Professor, Electrical Engineering Department, IIT Ropar	Deep learning for computer vision	March 22, 2022
Dr Peter Popovski	Villum Investigator Professor, Head of the Section on Connectivity, Department of Electronic Systems, Aalborg University	Aspects of Time and Space in Wireless Connectivity beyond 5G	6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21), Oct. 7-9, 2021
Dr Seshadri Sastry Kunapuli	Manager Technology (Artificial Intelligence and Machine Learning), Third Presence, Andhra Pradesh, India.	Artificial Intelligence for Industry	6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21), Oct. 7-9, 2021
Dr Piotr Cholda	Associate Professor of Institute of Telecommunications, AGH University of Science and Technology Al. Mickiewicza 30, 30-059 Krakow, Poland	Machine Learning in Communication Networks- Applying neural networks to traffic prediction and control	6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21), Oct. 7-9, 2021
Dr Vinod Kumar	Scientist-Engineer 'G' Division Head (GCDAD), Control Dynamics Design Group U. R. R. Satellite Centre, Bangalore-560017, India	Intelligent Techniques for Autonomous Landing on Mars	6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21), Oct. 7-9, 2021

Prof (Dr.) Prerna Gaur	Director, Netaji Subhas Institute of Technology, East Campus, Delhi	AI based Motion Control	6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21), Oct. 7-9, 2021
Mr Sanjay Singh	Project Manager, Infosys Limited Ipswich, UK	Research and Innovation for sustainable and human centered solutions	6th International Conference on Signal Processing, Computing and Control (ISPCC 2k21), Oct. 7-9, 2021
Prof Ghanshyam Singh	Professor, University of Johannesburg	Introduction to Industry 4.0 technology	July 3, 2021
Dr Vijay Chaurasiya	Associate Professor, IIIT Allahabad	Introduction to IoT: Research Issues & Challenges	July 10, 2021
Dr Sandeep Hanwate	Assistant Professor, College of Engineering Pune	Design of Smart Sensors	July 17, 2021
Mr. Harmesh Lal, Director	Embsoft Products Research and Development	Development of IoT applications	July 24, 2021
Dr Sahaj Saxena	Assistant Professor, Thapar Institute of Engg & Technology	Cyber Physical Systems – An insight	July 31, 2021
Mr Utkarsh Srivastava	Acalvio Technologies, Bengaluru	Advanced Robotics and Automation	Aug. 7, 2021
Mr Vivek Kumar	Senior Research Engineer, Centre for Development of Telematics (C-DOT)	Quantum Key Distribution	Aug. 14, 2021
Dr Pyari Mohan Pradhan	Associate Professor, IIT Roorkee	Data Protocols in IoT Networks	Aug. 21, 2022
Dr Satyasai Jagannath Nanda	Assistant Professor, MNIT Jaipur	Recent Trends in Data Clustering Algorithms And Their Applications in IoT	Aug. 28, 2022
Mr Sanjay Singh	Project Manager, Infosys Ltd.	Cloud computing Overview – Key to the success of Industry 4.0	Sept. 4, 2022

- Lectures Delivered by Faculty**

<b>Name of Faculty</b>	<b>Designation of Faculty</b>	<b>Topic of Lecture</b>	<b>Date</b>	<b>Venue</b>
Prof Shruti Jain	Professor	ECG Analysis for Robust Optimal Thresholding System Design	March 11, 2022	Short Term Course (STC) on "Machine Learning and its Applications" from 07th March to 12th March 2022 sponsored by Quality Improvement Program (QIP) Cell (AICTE), IIITN.
Prof Shruti Jain	Professor	Machine Learning Techniques for Medical Image Analysis	Feb 28, 2022	UGC-HRDC, NEHU Refresher Course in Biomedical, from 16th February – 1st March 2022 organised by Department of Biomedical Engineering, SoT, NEHU, Shillong.
Prof Shruti Jain	Professor	Medical image processing based on fusion and de-noising approaches	Feb 22, 2022	UGC-HRDC, NEHU Refresher Course in Biomedical, from 16th February – 1st March 2022 organised by Department of Biomedical Engineering, SoT, NEHU, Shillong.

Prof Shruti Jain	Professor	Computational Intelligence Techniques and its Application	Feb 16, 2022	UGC-HRDC, NEHU Refresher Course in Biomedical, from 16th February – 1st March 2022 organised by Department of Biomedical Engineering, SoT, NEHU, Shillong.
Prof Shruti Jain	Professor	Wearable Technology in Healthcare	Jan 21, 2022	Six days AICTE-ISTE refresher online program on Technology Driven Health care systems from Jan 18-22, 2022, organized by Department of Electronics & Communication Engineering, Jawaharlal College of Engineering and Technology Jawahar Gardens, Ottapalam, Kerala.
Dr Nishant Jain	Assistant Professor (SG)	Fusion of Biomedical Images	Nov 27, 2021	Keynote Speaker in the International Conference on Computational Intelligence & Engineering System Design (CIESD-21)" organized by KIT, Kanpur

Prof Shruti Jain	Professor	Toward design technology: trends, issues, and challenges	Nov 23, 2021	Five days AICTE sponsored Short Term Training Program (STTP) on Emerging Issues of VLSI Design from Nov 22-26, 2021, organized by Department of Electronics & Communication Engineering, School of Engineering & Technology ITM University Gwalior.
Dr Harsh Sohal	Associate Professor	Technology & Society	Sept 24, 2021	Faculty Development Centre - SMVDU under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT)



Prof Shruti Jain	Professor	Technological insights on artificial intelligence and deep learning	Sept 09, 2021	Five Days Faculty Development Program (Online) on Innovative Research & Development Trends in Electronics & Communication Engineering from Sept 6 -10, 2021, organized by the Department of Electronics & Communication Engineering, G.L. Bajaj Institute of Technology & Management, Greater Noida, U.P., India.
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- **Composition of Various Bodies**

- **Board of Studies (BOS)**

S No	Name	Designation	Institution
1	Prof Rajiv Kumar	HOD, Dept of ECE (Chairperson)	JUIT
3	Prof Karanjeet Singh	HOD Mathematics	JUIT
4	Prof P.B Barman	HOD PMS	JUIT
5	Prof AK Gupta	HOD CE	JUIT
6	Prof Sudhir Kumar	HOD BT/BI	JUIT
7	Dr Anupriya Kaur	HOD HSS	JUIT
8	Prof (Dr) Debashish Ghosh	HOD, ECE	IIT Roorkee
9	Prof (Dr) CC Tripathi	Prof. & HOD, ECE	University Institute of Engineering & Technology Kurukshetra University, Kurukshetra

10	Dr Balwinder Singh	Coordinator & Principal Engineer	Centre for Development of Advanced Computing-A Scientific Society of the Ministry of Communication & Information Technology, A-34, Indl Area, Phase VIII, Mohali
11	Prof Samir Dev Gupta	Professor, Dept. of ECE	JUIT
12	Prof Shruti Jain	Professor, Dept. of ECE	JUIT
13	Dr. Neeru Sharma	Asst Professor, Dept of ECE	JUIT
14	Dr. Salman Raju Talluri	Asst Professor, Dept of ECE	
15	Dr. Vikas Baghel	Asst Professor, Dept of ECE	JUIT
16	Dr. Shweta Pandit	Asst Professor, Dept of ECE	JUIT
17	Dr. Sunil Datt Sharma	Asst Professor, Dept of ECE	JUIT

## **DEPARTMENT OF COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY**

- **Department Vision and Mission**

- **Vision:**

To become a Center of Excellence in the computer sciences and information technology discipline with a strong research and teaching environment that adapts swiftly to the challenges of the 21st century.

- **Mission:**

- M1.** To provide qualitative education and generate new knowledge by engaging in cutting-edge research and by offering state-of-the-art undergraduate, postgraduate and doctoral programmes, leading to careers as Computer and IT professionals in the widely diversified domains of industry, government and academia.
    - M2.** To promote a teaching and learning process that yields advancements in state-of-the-art in computer science and information technology, resulting in integration of research results and innovations into other scientific disciplines leading to new technologies and products.
    - M3.** To harness human capital for sustainable competitive edge and social relevance by inculcating the philosophy of continuous learning and innovation in Computer Science and IT.

- **Faculty Details**

All faculty, their qualification and specialization as Appendix B

Name	Qualification	Specialization
Prof. Dr. Vivek Sehgal	PhD	Embedded Systems, Advanced Computer Architecture
Dr Hemraj Saini	PhD	Network Security, Information security, Cyber Security
Dr Pardeep Kumar	PhD	Computational and Machine Intelligence
Dr Pradeep Kumar Gupta	PhD, Post-Doctorate	Internet-of-Things, Sustainable Computing
Dr Rajni Mohana	PhD	Software engineering, Sentiment analysis , Health informatics
Dr Ravindara Bhatt	PhD	Sensor Networks: Deployment modeling, communication and energy efficient algorithms.
Dr Yugal Kumar	PhD	meta heuristic algorithms, swarm intelligence, pattern recognition
Dr Aman Sharma	PhD	Machine learning, bioinformatics, artificial intelligence, deep learning and data analytics
Dr Amit Kumar	PhD	Software Effort Estimation, Defect Prediction

Dr Amol Vasudeva	PhD	<i>Various attacks in MANETs, VANETs and Sensor Networks and their detection</i>
Dr. Deepak Gupta	PhD	Big Data Analytics, cyber security, machine/deep learning, and programming languages
Dr Ekta Gandotra	PhD	Malware Threat Profiling, Cyber Threat Intelligence
Dr Hari Singh	PhD	Distributed and Parallel Computing, Grid Computing
Dr Himanshu Jindal	PhD	Wireless Sensor Networks, Efficient Data Transmission, Digital Image Processing
Dr Jagpreet Sidhu	PhD	Distributed computing, Grid Computing, Cloud Computing
Dr Kapil Sharma	PhD	Data Center Network, Software defined network
Dr Monika Bharti	PhD	Cloud computing, networking, and Internet-of-Things
Dr Mrityinjay Singh	PhD	Database system, Dataspace System and PAY-AS-YOU-GO data Integration
Dr Rajinder Sandhu	PhD, Post Doctorate	Cloud computing, fog computing, machine learning
Dr Rakesh Kanji	PhD	Personalized medicine, Natural language processing
Dr Ruchi Verma	PhD	Information systems, social networks
Dr Shubham Goel	PhD	Machine Learning, Pattern Recognition and Data Mining
Dr Vipul Sharma	PhD	Computer Vision, Deep learning, Steganography & Pattern Recognition.
Mr Arvind Kumar	PhD (Pursuing)	Internet of Things, Computer Networks, Algorithms
Mr Prateek Thakral	PhD (Pursuing)	Graph theory, discrete mathematics
Mr Surjeet Singh	PhD (Pursuing)	Computer networks, mobile computing
Mr Praveen Modi	PhD (Pursuing)	Data Mining with Statistical Analysis

- **Programs**

- **Undergraduate Programs**

At the undergraduate level, the Department lays emphasis on theoretical and practical aspects of object-oriented programming, software engineering, Computer organization & architecture, database management, operating systems, theory of computation, compiler design, computer graphics, computer networks and Microprocessors and microcontrollers. The department provides exposure to emerging technologies as well as futuristic technologies like nanotechnology, quantum computing, bioinformatics, genetic algorithms and parallel programming.

- **New Courses introduced during the year**

S No	Title of New Course	Course Code
1	Foundation for Data Science and Visualization	20B1WCI531
2	Data Science and Visualization Lab	20B1WCI571
3	Big Data using Hadoop	19B1WCI531
4	Big Data using Hadoop Lab	19B1WCI571
5	Image Analysis and Pattern Recognition	19B1WCI532
6	Image Analysis and Pattern Recognition Lab	19B1WCI572
7	Cloud Computing: Concepts, Technology & Architecture	20B1WCI532
8	Cloud Computing: Concepts, Technology & Architecture Lab	20B1WCI572
9	Human-Computer Interaction	19B1WCI533
10	Human-Computer Interaction Lab	19B1WCI573
11	Social Media	19B1WCI534
12	Computer Vision	18B1WCI840
13	Introduction to Deep Learning	19B1WCI738
14	Ethics and Information Technology	19B1WCI831
15	Social and Information Network Analysis	18B1WCI832
16	Probabilistic Graphical Models	19B1WCI832
17	Information Modelling	19B1WCI833
18	Information Visualization	19B1WCI834
19	Cloud Computing Security	19B1WCI835
20	Knowledge-Based AI: Cognitive Systems	19B1WCI836
21	Game Development and Design	19B1WCI732
22	Game Development Lab	19B1WCI772
23	Computational Data Analysis	19B1WCI731
24	Computational Data Analysis lab	19B1WCI771

- **PhD Program**

The award of the PhD degree is in recognition of high academic achievements demonstrated by independent research and application of knowledge to the solution of technical and scientific problems. Creative and productive inquiry is the basic requirement underlying research work. The academic program leading to the degree involves fulfilling course credit requirements, residential requirements and a thesis giving a critical account of the research carried out, in any of the areas listed below. Algorithms, Artificial Intelligence, Computer Networks, Computer Systems Architecture, Cyber Security, Software Engineering and Information Systems, Image Information Processing, Parallel and Distributed Computing, Database systems and Datamining.

- **Lab Facilities**

- **New Labs**

Lab No.	Lab Name
NIL	NIL

- **Equipments**

<b>Lab No.</b>	<b>Equipment Name</b>
CL3	2 Nos. Logitech Web Cam 2 Nos. Headphones 61 Nos. Desktop with Processor intel® Core™ i5-6500 CPU @3.20GHz 3.20 GHz RAM 8GB 64 bit OS
CL4	1 Nos. Logitech Web Cam 1 Nos. Headphone 49 Nos. Processor intel® Core™ i5-6500 CPU @3.20GHz 3.20 GHz RAM 8GB 64 bit OS
CL5	Webcam- 02 no. Headphone- 02 no. 62 Nos. Desktop with Processor Intel(R) Core(TM) i3 @ 2.90GHz RAM 2.00 GB, HDD - 250 GB OS - Windows 7 Professional
CL6	Webcam- 01 no. Headphone- 01 no. 49 Nos. Processor Intel(R) Core(TM) i5 @6500 3.00GHz RAM 8.00 GB, HDD - 1 TB OS - Windows 10 Pro
CL7	Head Phone (Qty 1), Camera(Qty 1) 43 Nos. Desktop with Processor P-4 (31), Core 2 Duo (03), I3-(09)
CL8	Head Phone (Qty 1), Camera(Qty 1) 71 Nos. Desktop with Processor I3- (70) , Intel Xeon (01)
CL9	Webcam- 02 no. Headsets- 01 no. 60 Nos. Desktop with Processor intel® Core™ i5-6500 CPU @3.20GHz 3.20 GHz RAM 8GB 64 bit OS
CL10	Head Phone (Qty 1), Camera(Qty 1) 78 Nos. Desktop with Intel(R) Core i5 7400 cpu @ 3.00 GHZ, 3.00 GHz 64-bit, 1 TB Hard disk, 8GB RAM (65), 16 GB RAM (13)
CL11	Head Phone (Qty 1), Camera(Qty 1) 30 Nos. Desktop with Intel(R) Core i5 7400 cpu @ 3.00 GHZ, 3.00 GHz 64-bit, 1 TB Hard disk, 8GB RAM

CL12	Tablet writing Pad- 1Nos Webcam- 01 no. Headsets- 01 no. Creative Speaker A235- 01 Nos. 12 Nos. Desktop with Core i5 5 7400 cpu @ 3.00 GHZ,3.00 GHZ 64-bit, 1TB Hard disk, 8GB RAM
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• **Lab Staff with qualification**

S. No.	Name	Qualification	Designation
1.	Sh Shiv Kumar Gupta	Pre PhD Course (CS), MPhil (CS), MCA, MSc(Mathematics)	Sr. Lab Engineer
2.	Sh Ashok Kishtwal	MTech (CSE)	Sr. Lab Engineer
3.	Sh Rohit	MPhil(CS), MCA, MSc(IT), PGDCA, PGDBI, GNIIT	Lab Engineer
4.	Sh Vijay Kumar	MCA, A LEVEL, APGDIT	Sr. Lab Technician
5.	Sh Hardeep Singh	Diploma in Computer Engg, B.com, MS-CIT, MCA Pursuing	Sr. Lab Technician
6.	Sh Mohan Sharma (Associated with ECE Dept)	BCA, Diploma in H/N, CCNA	Lab Technician
7.	Sh Ranvijai Singh	MA, ADCA,PGDCA	Lab Technician
8.	Sh Ravi Raina	3 Years Diploma in Computer, BCA, MCSE and Network+: Concepts and Application Complete	Lab Assistant
9.	Sh Rajesh Kumar Sahu (Associated with Civil Dept)	3 Years Diploma in Computer Science and Engg., BCA	Lab Assistant
10.	Sh Vineet Paliwal	Diploma In Computer H/W and Networking, BCom	Lab Assistant
11.	Sh Arun Kumar Guleria	BTech CSE, 3-Years Diploma in Computer Engg	Jr. Lab Assistant

• **Research Projects Sanctioned during the Academic Year/In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	Dr Yugal Kumar	-	HPDEST	10 Lakh		completed

- **Conferences, Seminars and Workshops/Faculty development program**

### **Conferences**

- **Conferences Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Participation</u></b>	<b><u>Remarks</u></b>
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology, Wanknaghat	Dr. P.K. Gupta	Principal General Chair, Reviewer, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology, Wanknaghat	Dr. Ekta Gandotra	Conference General Chair, Reviewer, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Aman Sharma	Conference Co-Chair, Reviewer, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Vivek Sehgal	Publication Committee Chair, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Ravindara Bhatt	TPC Co-Chair, Reviewer, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Kapil Sharma	Member of Publication Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Jagpreet Sidhu	Hospitality Committee Chair, Session Chair
26-28 November, 2021	Sixth International Conference on Image	Jaypee University of	Dr. Yugal	Organizing Committee Chair, Session Chair



	Information Processing (ICIIP2021)	Information Technology		
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Rajinder Sandhu	Member of Organizing Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Vipul Sharma	Member of Organizing Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Pankaj Dhiman	Member of Organizing Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Mr. Surjeet	Member of Organizing Committee
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Himanshu	Member of Hospitality Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Pardeep Kumar	Member of Registration Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Monika	Member of Registration Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Amit Kumar	Member of Organizing Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing	Jaypee University of Information	Mr. Arvind Kumar	Member of Organizing Committee

	(ICIIP2021)	Technology		
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Rajni Mohana	Publicity Committee Chair, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Mr. Prateek	Member of Organizing Committee
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Ruchi	Program Chair, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Amol	Member of Publication Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Hari Singh	Member of Registration Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Deepak Gupta	Member of Publication Committee, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Mr. Praveen Modi	Member of Organizing Committee
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Hemraj Saini	Registration Committee Chair, Session Chair
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Jaypee University of Information Technology	Dr. Mrityunjay Singh	Member of Hospitality Committee, Session Chair

## Details of ICIIP 2021 (26-28 November, 2021)

### Key note speakers

Prof. Dr. **Johan Debayle**, MINES Saint-Etienne, France

Prof. Dr. Abhinav Dhall, IITR, India

Prof. Dr. Sanjay Kumar Singh, IIT BHU, India

Prof. Dr. Aparajita Ojha, IIITDM, Jabalpur, India

### Glimpses of the Event



- **Conferences Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Department of CSE & IT, JUIT, Wagnaghat, Solan	Dr. Pardeep Kumar	Attended
8-10 September, 2021	International Conference on Advances in Data Computing, Communication & Security (I3CS 2021)	NIT Kurukshetra	PRATEEK	Attended
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Department of CSE & IT, JUIT, Wagnaghat, Solan	Dr. Aman Sharma	Attended
26-28 November, 2021	Sixth International Conference on Image Information Processing (ICIIP2021)	Department of CSE & IT, JUIT, Wagnaghat, Solan	Arvind Kumar	Attended
13-16 December, 2021	IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS2021)	Hyderabad	Arvind Kumar	Attended
6-7 September, 2021	The 5th International Symposium on Mobile Internet Security	South Korea	Dr. Monika Bharti	Attended

- **Seminars Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
July 2021	Webinar on Insight of Blockchain Standards	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
July 2021	Webinar on IEEE Cybersecurity and Privacy Standardization	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Aug. 2021	Webinar on IEEE Std 1838: 3DIC Test Infrastructure For Use	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online

	Today			
Sep. 2021	Webinar on IEEE 802 Networking Standards – Connecting the World	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Sep. 2021	Webinar on Standards for Systems and Software Engineering: What Works?	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Jan. 2022	Webinar on IEEE Std 1838: 3DIC Test Infrastructure For Use Today	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Jan. 2022	Webinar on Overview of IEEE Smart Manufacturing Standards	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Feb. 2022	Webinar on IEEE Standards on Learning Technology	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Feb. 2022	Webinar on Knowledge Graphs Standards: Unifying Data Representation	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Mar. 2022	Webinar on IEEE Standards on Deep Learning-based Assessment for Virtual Experiences	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
Mar. 2022	Webinar on Armenia: Echoing to World Community and Building a New Heritage in Computer Science and Engineering	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
April 2022	Big Stream Data Analytics and Applications	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
April. 2022	Eight Key Ideas in Computer Architecture from Eight Decades of Innovation	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
May. 2022	Making Meetings Fun	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
May. 2022	Emotional Intelligence	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online

		Society	Sehgal	
May. 2022	Persuasive Conversations: Why Low Impact Words Don't Work	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
June. 2022	Writing Confident, Efficient Emails	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
June. 2022	The Fantastic Five, the 5 Soft Skills Every Technical Professional Should Develop	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online

### **Workshops/MOOCs**

- Workshops Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Participation</u></b>	<b><u>Remarks</u></b>
June 6-11, 2022	Data analytics and its Research perspectives	Jaypee university	Dr. Rajni Mohana	CSE & ECE Department at
March 22-26, 2022	Image Processing with Deep Learning	JUIT Solan	Dr. Nishant Jain, Dr. Emjee and Dr. Vipul Sharma	CSE & IT Department at
0.6.06.2022	Data analytics and its Research perspectives	Jaypee university	Dr. Aman Sharma, Dr. Rajni Mohana, Dr. Shubham Goel, Dr. Rakesh Kanji	CSE & IT Department at
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	JUIT Solan	Dr. Monika Bharti, Dr. Pankaj Dhiman, Dr. Amit Kumar Jakhar	CSE & IT Department at

- Workshops/MOOCs Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
September 20-24, 2021	Data and Analytics	Virtual Mode at JUIT		Organized by BNM Institute of Technology, Bangalore and sponsored by AICTE Training and Learning (ATAL) Academy
December 27-31, 2021	Quantum Computing and Communications: New Paradigms	Virtual Mode at JUIT		Organized by SRM University-AP, Andhra Pradesh jointly with CDAC.

				Bengaluru
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT		CSE & IT Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Dr. Monika Bharti	CSE & IT Department at JUIT
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Dr. Amol Vasudeva	CSE & IT Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Dr. Amol Vasudeva	CSE & IT Department at JUIT
March 22-26, 2022	Image Processing with Deep Learning	Virtual Mode at JUIT	Dr. Monika Bharti	CSE & ECE Department at JUIT
March 22-26, 2022	Image Processing with Deep Learning	Virtual Mode at JUIT	Dr. Himanshu Jindal	CSE & ECE Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Arvind Kumar	CSE & IT Department at JUIT
7-10-2021 to 9-10-2021	IEEE International Conference on Signal Processing, Computing and Control (ISPCC-2k21)	Virtual Mode at JUIT	Dr Amit Kumar Jakhar	JUIT
07-03-2022 to 11-03-2022	Unleashing Research Potential: Global Trends and Practices Galgotias University, Greater Noida, Uttar Pradesh	Virtual Mode at JUIT	Dr Amit Kumar Jakhar	Galgotias University, Greater Noida, Uttar Pradesh
March 22-26, 2022	Image Processing with Deep Learning	Virtual Mode at JUIT	Dr. Jagpreet	CSE & ECE Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Dr. Jagpreet	CSE & IT Department at JUIT
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Dr. Jagpreet	CSE & IT Department at JUIT

## **FDPs**

- FDPs Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Participation</u></b>	<b><u>Remarks</u></b>
September 20-24, 2021	Data and Analytics	Virtual Mode at JUIT	Attended	Organized by BNM Institute of Technology, Banglore and sponsored by AICTE Training and Learning (ATAL) Academy
December 27-31, 2021	Quantum Computing and Communications: New Paradigms	Virtual Mode at JUIT	Attended	Organized by SRM University-AP, Andhra Pradesh jointly with CDAC. Bengluru
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Attended	CSE & IT Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Attended	CSE & IT Department at JUIT
March 22-26, 2022	Image Processing with Deep Learning	Virtual Mode at JUIT	Organized	CSE & ECE Department at JUIT
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Attended	CSE & IT Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Attended	CSE & IT Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Organized	CSE & IT Department at JUIT
March 22-26, 2022	Image Processing with Deep Learning	Virtual Mode at JUIT	Attended	CSE & ECE Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Organized	CSE & IT Department at JUIT



March 22-26, 2022	Image Processing with Deep Learning	Virtual Mode at JUIT	Attended	CSE & ECE Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Attended	CSE & IT Department at JUIT
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Organized	CSE & IT Department at JUIT
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Organized	CSE & IT Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Organized	CSE & IT Department at JUIT
7-10-2021 to 9-10-2021	IEEE International Conference on Signal Processing, Computing and Control (ISPCC-2k21)	Virtual Mode at JUIT	Attended	JUIT
07-03-2022 to 11-03-2022	Unleashing Research Potential: Global Trends and Practices Galgotias University, Greater Noida, Uttar Pradesh	Virtual Mode at JUIT	Attended	Galgotias University, Greater Noida, Uttar Pradesh
March 22-26, 2022	Image Processing with Deep Learning	Virtual Mode at JUIT	Attended	CSE & ECE Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Attended	CSE & IT Department at JUIT
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Attended	CSE & IT Department at JUIT

• **FDPs Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode JUIT	Dr. Vipul Sharma	CSE & IT Department at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode JUIT	Dr. Vipul Sharma	CSE & IT Department at JUIT
June 24-28, 2022	Machine Learning and Data Science using Python: Hands-on Approach	Virtual Mode JUIT	Dr. Vipul Sharma	CSE Department NIT Jalandhar
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode JUIT	Dr. Pardeep Kumar	CSE & IT Department

				at JUIT
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode JUIT	Dr. Pardeep Kumar	CSE & IT Department at JUIT
May 9-13, 2022	NEP 2020 Implementation in Higher Education Institutes	NITTTR Chandigarh	PRATEEK	Online Mode
Dec 20-24, 2021	Introduction to Deep Learning	UVCE, Bengaluru	PRATEEK	Online Mode (AICTE ATAL)
Dec 13-18, 2021	Advancements in Computer Science & Information Technology	SLIET, Longowal, Punjab	PRATEEK	Online Mode
Oct 25-29, 2021	Artificial Intelligence & Machine Learning	RGPV, Bhopal	PRATEEK	Online Mode (AICTE ATAL)
June 6-11, 2022	Data Analytics and its Research Perspectives	Virtual Mode at JUIT	Dr. Ekta Gandotra	Virtual Mode
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Dr. Ekta Gandotra	Virtual Mode
December 27-31, 2021	Quantum Computing and Communications: New Paradigms	Virtual Mode at JUIT	Dr. Ekta Gandotra	Virtual mode (SRM University-AP)
June 13-24, 2022	Growing Role of Machine Learning in Cyber-Security	Virtual Mode at JUIT	Dr. Deepak Gupta	Virtual Mode
December 27-31, 2021	Quantum Computing and Communications: New Paradigms	Virtual Mode at JUIT	Dr. Deepak Gupta	Virtual mode (SRM University-AP)

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr. P.K. Gupta	COVID-WideNet: A capsule network for COVID-19 detection	Applied Soft Computing Journal,	Pradeep Kumar Gupta, Mohammad Khubeb Siddiqui, Xiaodi Huang, Ruben Morales-Menendez, Harsh Panwar, Hugo Terashima-Marin, Mohammad Saif Wajid (2022). COVID-WideNet:	

			A capsule network for COVID-19 detection. Applied Soft Computing Journal, (), 108780	
Dr. P.K. Gupta	A Novel and Secure Hybrid iWD-MASK Algorithm for Enhanced Image Security. Recent Patents on Computer Science	Recent Advances in Computer Science and Communications	Pradeep Kumar Gupta, Righa Tandon (2021). A Novel and Secure Hybrid iWD-MASK Algorithm for Enhanced Image Security. Recent Advances in Computer Science and Communications, 14 (2), 384-394	3
Dr. P.K. Gupta	QoS-aware CR-BM-based hybrid framework to improve the fault tolerance of fog devices.	Journal of Applied Research and Technology	P. Sharma, Pradeep Kumar Gupta (2021). QoS-aware CR-BM-based hybrid framework to improve the fault tolerance of fog devices. Journal of Applied Research and Technology, 19 (1), 66-76.	2
Dr. P.K. Gupta	K-Step Crossover Method based on Genetic Algorithm for Test Suite Prioritization in Regression Testing	Journal of Universal Computer Science	Pradeep Kumar Gupta (2021). K-Step Crossover Method based on Genetic Algorithm for Test Suite Prioritization in Regression Testing. Journal of Universal Computer Science, 27 (2), 170-189.	1
Dr. P.K. Gupta	A Novel Pseudonym Assignment and Encryption Scheme for Preserving the Privacy of	Defence Science Journal,	Righa Tandon, Pradeep Kumar Gupta (2021). A Novel	3

	Military Vehicles		Pseudonym Assignment and Encryption Scheme for Preserving the Privacy of Military Vehicles. Defence Science Journal, 71 (2), 192-199.	
Dr. P.K. Gupta	A Novel Deep Learning-based Whale Optimization Algorithm for Prediction of Breast Cancer	Brazilian Archives of Biology and Technology	Poonam Rana, Pradeep Kumar Gupta, Vineet Sharma (2021). A Novel Deep Learning-based Whale Optimization Algorithm for Prediction of Breast Cancer. Brazilian Archives of Biology and Technology, 64 (e21200221), 1-16.	1
Dr. P.K. Gupta	Application of Deep Learning on Student Engagement in e-learning environments	Computers and Electrical Engineering	Prakhar Bhardwaj, Pradeep Kumar Gupta, Harsh Panwar, Mohammad Khubeb Siddiqui, Ruben Morales-Menendez, Anubha Bhaik (2021). Application of Deep Learning on Student Engagement in e-learning environments. Computers and Electrical Engineering, 93 (July 2021), 1-11	13
Dr. P.K. Gupta	TrafC- AnTabu: AnTabu routing algorithm for congestion control and traffic lights management	Internet Technology Letters	Ajay Verma, Righa Tandon, Pradeep Kumar Gupta (2021).	

	using Fuzzy model		TrafC- AnTabu: AnTabu routing algorithm for congestion control and traffic lights management using Fuzzy model. Internet Technology Letters, 5 (2), 1-6	
Dr. Hari Singh	A Critical Analysis of Apache Hadoop and Spark for Big Data Processing	Proceedings of the 2021 6th IEEE International Conference on Signal Processing, Computing and Control (ISPCC)	Piyush Sewal and Hari Singh, "A Critical Analysis of Apache Hadoop and Spark for Big Data Processing", 2021 6th IEEE International Conference on Signal Processing, Computing and Control (ISPCC), organized by the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Wanknaghat, Himachal Pradesh, India on Oct (7-9), 2021 in Online Mode, DOI: 10.1109/ISPCC53510.2021.9609518	1
Dr. Hari Singh	A study of big data processing for sentiments analysis	Large-Scale Data Streaming, Processing, and Blockchain Security, IGI Global, Book Chapter Submission	Dinesh Chander, Hari Singh, Abhinav Kirti Gupta "A study of big data processing for sentiments analysis", IGI	0

			Global, Book Chapter Submission: Large-Scale Data Streaming, Processing, and Blockchain Security, Accepted July 2020 (Scopus) UK: IGI Global. DOI: 10.4018/978-1-7998-3444-1.ch001 [ISBN: 9781799834441, 1799834441, 9781799834458, and 9781799834465].	
Dr. Amol Vasudeva	On the vulnerability of the mobile ad hoc network to transmission power controlled Sybil attack: Adopting the mobility-based clustering	Journal of King Saud University - Computer and Information Sciences	Amol Vasudeva, Manu Sood, "On the vulnerability of the mobile ad hoc network to transmission power controlled Sybil attack: Adopting the mobility-based clustering", Journal of King Saud University - Computer and Information Sciences, 2022, DOI: <a href="https://doi.org/10.1016/j.jksuci.2022.04.020">https://doi.org/10.1016/j.jksuci.2022.04.020</a> .	0
Dr. Pardeep Kumar	Integrating big data driven sentiments polarity and ABC-optimized LSTM for time series forecasting	Multimedia Tools and Applications	Kumar, R., Kumar, P. & Kumar, Y. Integrating big data driven sentiments polarity and ABC-optimized LSTM for time series forecasting. Multimed Tools	1

			Appl (2021).	
Dr. Pardeep Kumar	Three stage fusion for effective time series forecasting using Bi-LSTM-ARIMA and improved DE-ABC algorithm	Neural Computing and Applications	Kumar, R., Kumar, P. & Kumar, Y. Three stage fusion for effective time series forecasting using Bi-LSTM-ARIMA and improved DE-ABC algorithm. Neural Comput & Applic (2022). <a href="https://doi.org/10.1007/s00521-022-07431-x">https://doi.org/10.1007/s00521-022-07431-x</a>	0
Dr. Pardeep Kumar	Two-phase hybridisation using deep learning and evolutionary algorithms for stock market forecasting	International Journal of Grid and Utility Computing	Kumar, R., Kumar, P. & Kumar, Y. Two-phase hybridisation using deep learning and evolutionary algorithms for stock market forecasting. International Journal of Grid and Utility Computing, 12 (5-6), 573-589 (2022)	1
Dr. Pardeep Kumar	Multi-step time series analysis and forecasting strategy using ARIMA and evolutionary algorithms	International Journal of Information Technology	Kumar, R., Kumar, P. & Kumar, Y. Multi-step time series analysis and forecasting strategy using ARIMA and evolutionary algorithms, 14, 359-373 (2021)	4
Dr. Pardeep Kumar	Editorial Preface: Machine Learning, Big Data, and IoT for Medical Informatics	Intelligent Data-Centric Systems	Kumar P, Kumar R, Tawhid M. Editorial Preface: Machine Learning, Big Data, and IoT for	0

			Medical Informatics. Intelligent Data-Centric Systems, xxi-xxv, 2021	
Dr. Pardeep Kumar	Editorial Preface. Machine Learning for Intelligent Multimedia Analytics	Studies in Big Data	Kumar P and Singh AK. Editorial Preface. Machine Learning for Intelligent Multimedia Analytics, 82,V-IX, 2021	6
Aman Sharma	“Ensemble framework for cardiovascular disease prediction”	Computers in Biology and Medicine, May 2022.(DOI: <a href="https://doi.org/10.1016/j.compbiomed.2022.105624">https://doi.org/10.1016/j.compbiomed.2022.105624</a> )	A. Tiwari, A. Chugh, A. Sharma	0
Ekta Gandotra	Detection of Improperly worn face masks using deep learning - A preventive measure against the spread of COVID-19	International Journal of Interactive Multimedia and Artificial Intelligence	Anubha Bhaik, Vaishnavi Singh, Ekta Gandotra and Deepak Gupta, “Detection of Improperly Worn Face Masks using Deep Learning – a preventive measure against the spread of COVID-19,” in International Journal of Interactive Multimedia and Artificial Intelligence, ISSN: 1989-1660, In press.	
Deepak Gupta	Detection of Improperly worn face masks using deep learning - A preventive measure against the spread of COVID-19	International Journal of Interactive Multimedia and Artificial Intelligence	Anubha Bhaik, Vaishnavi Singh, Ekta Gandotra and Deepak Gupta, “Detection of Improperly Worn Face Masks using	



			Deep Learning – a preventive measure against the spread of COVID-19,” in International Journal of Interactive Multimedia and Artificial Intelligence, ISSN: 1989-1660, In press.	
Amit Kumar	Sentiment analysis on the impact of corona virus in social life using the BERT model	Social Network Analysis and Mining 11 (1), 1-11	M Singh, AK Jakhar, S Pandey	55
Amit Kumar	Dog breed classification using convolution neural network	International Journal of Swarm Intelligence 6 (2), 130-142	Amit Kumar Jakhar, Mrityunjay Singh and Anjani Kumar Shukla	
Jagpreet	A correlation-based investigation of VM consolidation for cloud computing	International Journal of Cloud Computing 11(3)	Khattar, N., Singh, J., & Sidhu, J. (2022). A correlation-based investigation of VM consolidation for cloud computing. International Journal of Cloud Computing.	
Jagpreet	Insider threat prevention in distributed database as a service cloud environment	Computers & Industrial Engineering 169, 108278	Deep, G., Sidhu, J., & Mohana, R. (2022). Insider Threat Prevention in Distributed Database as a Service Cloud environment. Computers & Industrial Engineering, 108278.	
Jagpreet	Remote Radio Head Scheduling in LTE-Advanced Networks	Wireless Personal Communications, 122(1), 621-644.	Ramdev, M. S., Bajaj, R., & Sidhu, J. (2022). Remote Radio	

			Head Scheduling in LTE-Advanced Networks. Wireless Personal Communications, 122(1), 621-644.	
Dr.Rajni Mohana	Insider threat prevention in distributed database as a service cloud environment	Computers & Industrial Engineering 169, 108278	Deep, G., Sidhu, J., & Mohana, R. (2022). Insider Threat Prevention in Distributed Database as a Service Cloud environment. Computers & Industrial Engineering, 108278.	
Dr.Rajni Mohana	Distance Aware VM Allocation Process to Minimize Energy Consumption in Cloud Computing	Recent Advances in Computer Science and Communications 14(5)	Singh, G., Mahajan, M., & Mohana, R. (2021). Distance Aware VM Allocation Process to Minimize Energy Consumption in Cloud Computing. Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science), 14(5), 1641-1649.	
Dr.Rajni Mohana	A framework for scheduling IoT application jobs on fog computing infrastructure based on QoS parameters	International Journal of Pervasive Computing and Communications	G Singh, M Mahajan, R Mohana - Recent Advances in Computer Science and ..., 2021	

Prof. Vivek Kumar Sehgal	Intelligent Solutions for Earthquake Data Analysis and Prediction for Future Smart Cities	Computers & Industrial Engineering	Dey, B., Dikshit, P., Sehgal, S., Trehan, V., & Sehgal, V. K. (2022). Intelligent solutions for earthquake data analysis and prediction for future smart cities. Computers & Industrial Engineering, 170, 108368.	2
Prof. Vivek Kumar Sehgal	Natural disasters management using social internet of things	Multimedia Tools and Applications	Rangra, A., & Sehgal, V. K. (2022). Natural disasters management using social internet of things. Multimedia Tools and Applications, 1-15.	1
Prof. Vivek Kumar Sehgal	Emerging Architecture for Heterogeneous Smart Cyber-Physical Systems for Industry 5.0	Computers & Industrial Engineering	Thakur, P., & Sehgal, V. K. (2021). Emerging architecture for heterogeneous smart cyber-physical systems for industry 5.0. Computers & Industrial Engineering, 162, 107750.	9
Prof. Vivek Kumar Sehgal	Mobile Networks-on-Chip Mapping Algorithms for Optimization of Latency and Energy Consumption	Mobile Networks and Applications	Kumar, A., Sehgal, V. K., Dhiman, G., Vimal, S., Sharma, A., & Park, S. (2021). Mobile networks-on-chip mapping algorithms for optimization of latency and energy consumption. Mobile Networks and Applications,	7

			1-15.	
Prof. Vivek Kumar Sehgal	CASE-CF: Context Aware Smart Epidemic Control Framework	New Generation Computing	Gill, H. K., Sehgal, V. K., & Verma, A. K. (2021). CASE-CF: context aware smart epidemic control framework. New Generation Computing, 39(3), 541-568.	1
Prof. Vivek Kumar Sehgal	A deep neural network based context-aware smart epidemic surveillance in smart cities	Library Hi Tech	Gill, H. K., Sehgal, V. K., & Verma, A. K. (2021). A deep neural network based context-aware smart epidemic surveillance in smart cities. Library Hi Tech.	1

• **Books Published**

Name of Faculty	Name of Book	Reference	Remark
Pradeep Kumar Gupta	International Conference on Image Information Processing (ICIIP)	International Conference on Image Information Processing (ICIIP) (6th). JUIT Solan: IEEE USA. [ISBN : 978-1-6654-3361-7]	
Ekta Gandotra	International Conference on Image Information Processing (ICIIP)	International Conference on Image Information Processing (ICIIP) (6th). JUIT Solan: IEEE USA. [ISBN : 978-1-6654-3361-7]	
Vivek Kumar Sehgal	International Conference on Image Information Processing (ICIIP)	International Conference on Image Information Processing (ICIIP) (6th). JUIT Solan: IEEE USA. [ISBN : 978-1-6654-3361-7]	
Ravindara Bhatt	Unmanned Aerial Vehicles for Internet of Things (IoT): Concepts, Techniques, and Applications.	Unmanned Aerial Vehicles for Internet of Things (IoT): Concepts, Techniques, and Applications. : Wiley. [ISBN : 978-1-119-	

		76882-1]	
Pradeep Kumar Gupta	Advances in Computing and Data Sciences, Part 1. Springer Nature Switzerland AG: Springer International Publishing	Pringer Nature Switzerland AG: Springer International Publishing. [ISBN : 978-3-030-88243-3]	
Yugal Kumar	Futuristic Trends in Networks and Computing Technologies-I	Futuristic Trends in Networks and Computing Technologies-I. Springer Singapore: Springer. [ISBN: 978-981-16-1480-4].	
Yugal Kumar	Futuristic Trends in Networks and Computing Technologies-II	Futuristic Trends in Networks and Computing Technologies-II. Springer Singapore: Springer. [ISBN : 978-981-16-1483-5]	
Pradeep Kumar Gupta	Advances in Computing and Data Sciences, Part 2	Advances in Computing and Data Sciences, Part 2. Springer Nature Switzerland AG: Springer International Publishing. [ISBN : 978-3-030-81461-8]	
Hemraj Saini	Cybersecurity: Ambient Technologies, IoT, and Industry 4.0 Implications.	Cybersecurity: Ambient Technologies, IoT, and Industry 4.0 Implications. : CRC Press. [ISBN : 9780367702168]	
Pardeep Kumar	Machine Learning, Big Data, and IoT for Medical Informatics	Machine Learning, Big Data, and IoT for Medical Informatics. Amsterdam, Netherlands: Elsevier. [ISBN : 9780128217818]	
Yugal Kumar	Machine Learning, Big Data, and IoT for Medical Informatics	Machine Learning, Big Data, and IoT for Medical Informatics. Amsterdam, Netherlands: Elsevier. [ISBN : 9780128217818]	
Pardeep Kumar	Machine Learning for Intelligent Multimedia Analytics: Techniques and Applications (Ist)	Machine Learning for Intelligent Multimedia Analytics: Techniques and Applications (Ist). Singapore: Springer.	

		[ISBN : 978-981-15-9491-5]	
Hari Singh	2020 Sixth International Conference on Parallel, Distributed and Grid Computing (PDGC)	IXth International Conference on Parallel, Distributed and Grid Computing (PDGC). USA: IEEE. [ISBN : 978-1-7281-7132-6]	
Pradeep Kumar Gupta	2020 Sixth International Conference on Parallel, Distributed and Grid Computing (PDGC)	IXth International Conference on Parallel, Distributed and Grid Computing (PDGC). USA: IEEE. [ISBN : 978-1-7281-7132-6]	
Hari Singh	Data Science for Effective Healthcare Systems. New York	Data Science for Effective Healthcare Systems. New York: Chapman and Hall/CRC. [ISBN : 9781032105680]	
Ravindara Bhatt	Data Science for Effective Healthcare Systems. New York	Data Science for Effective Healthcare Systems. New York: Chapman and Hall/CRC. [ISBN : 9781032105680]	
Prateek Thakral	Data Science for Effective Healthcare Systems. New York	Data Science for Effective Healthcare Systems. New York: Chapman and Hall/CRC. [ISBN : 9781032105680]	

• **Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Mrityunjay Singh	COVID-19 Detection Using Chest X-Ray and Transfer Learning	Mohit Dua, Ankit Kumar Jain, Handbook of Research on Machine Learning Techniques for Pattern Recognition and Information Security	Handbook of Research on Machine Learning Techniques for Pattern Recognition and Information Security (pp. 171-186). : IGI Global. [ISBN : 9781799832997]	
Aman Sharma	Machine Learning Applications in Anti-cancer Drug Discovery	Intelligent Healthcare	Intelligent Healthcare (pp. 163-179). : Springer, Cham.	

Aman Sharma	Mouse-Less Cursor Control for Quadriplegic and Autistic Patients Using Artificial Intelligence	Artificial Intelligence for Accurate Analysis and Detection of Autism Spectrum Disorder	Artificial Intelligence for Accurate Analysis and Detection of Autism Spectrum Disorder (pp. 105-137). : IGI Global.	
Prateek Thakral	Diagnosis and Prediction of Type-2 Chronic Kidney Disease Using Machine Learning Approaches	Meenu Gupta, Rachna Jain, Arun Solanki, Fadi Al-Turjman, Cancer Prediction for Industrial IoT 4.0: A Machine Learning Perspective	A Machine Learning Perspective (pp. 79-90). New York: Chapman and Hall/CRC. [ISBN : 9781003185604]	
Yugal Kumar	A novel approach for securing e-health application in a cloud environment	Pardeep Kumar, Yugal Kumar, Mohamed A Tawhid, Machine Learning, Big Data, and IoT for Medical Informatics	Machine Learning, Big Data, and IoT for Medical Informatics (pp. 349). : Elsevier. [ISBN : 9780128217771]	
Amol Vasudeva	Battery and Energy Management in UAV-Based Networks	Vandana Mohindru, Yashwant Singh, Ravindara Bhatt, Anuj Kumar Gupta, Unmanned Aerial Vehicles for Internet of Things (IoT): Concepts, Techniques, and Applications	Manned Aerial Vehicles for Internet of Things (IoT): Concepts, Techniques, and Applications (First, pp. 43-72). USA: John Wiley & Sons. [ISBN : 978-1-119-76882-1]	
Hemraj Saini	Security Concerns at Various Network Phases Through Blockchain Technology	Choudhary A., Agrawal A.P., Logeswaran R., Unhelkar B., Applications of Artificial Intelligence and Machine Learning	Applications of Artificial Intelligence and Machine Learning (Lecture Notes in Electrical Engineering, pp. 605-616). Singapore: Springer. [ISBN : 978-981-16-3066-8; 978-981-16-3067-5]	
Prateek Thakral	Improving the Accuracy of Writer Detection of Handwritten Text Using Image Hashing	Brahmjit Singh, Carlos A. CoelloCoello, Poonam Jindal & Pankaj Verma, Intelligent	Intelligent Computing and Communication Systems (pp. 313-320). Singapore: Springer	

		Computing and Communication Systems		
Ekta Gandotra	Translational Bioinformatics in Healthcare and Medicine	Khalid Raza, Nilanjan Dey, Advances in ubiquitous sensing applications for healthcare, Translational Bioinformatics in Healthcare and Medicine	Advances in ubiquitous sensing applications for healthcare, Translational Bioinformatics in Healthcare and Medicine, Academic Press, (pp. 183-192). : Elsevier. [ISBN : 9780323898249]	
Pardeep Kumar	Secure Image Transmission in Wireless Network Using Conventional Neural Network and DOST	Pardeep Kumar...[et. al], Machine Learning for Intelligent Multimedia Analytics: Techniques and Applications	Machine Learning for Intelligent Multimedia Analytics: Techniques and Applications (First, pp. 91-101). Singapore: Springer. [ISBN : 978-981-15-9492-2]	
Pardeep Kumar	E-CART: An Improved Data Stream Mining Approach	Trends in Deep Learning Methodologies: Algorithms, Applications, and Systems	Trends in Deep Learning Methodologies: Algorithms, Applications, and Systems (1st, pp. 227-239). Amsterdam, Netherlands: Academic Press, Elsevier. [ISBN : 9780128222263]	
Aman Sharma	Machine Learning Perspective in Cancer Research	Handbook of Research on Disease Prediction Through Data analytics and Machine Learning	Handbook of Research on Disease Prediction Through Data analytics and Machine Learning (pp.).	
Hari Singh	A Study of Big Data Processing for Sentiments Analysis	Hemraj Saini, Geetanjali Rathee, Dinesh Kumar Saini , Large-Scale Data Streaming, Processing, and Blockchain Security	Large-Scale Data Streaming, Processing, and Blockchain Security (pp. 38). : IGI Global. [ISBN : 9781799834441]	
Hemraj Saini	Energy and	IRM/IT	Research Anthology	



	SLA Efficient Virtual Machine Placement in Cloud Environment Using Non-Dominated Sorting Genetic Algorithm	professionals, Research Anthology on Multi-Industry Uses of Genetic Programming and Algorithms	on Multi-Industry Uses of Genetic Programming and Algorithms (pp. 17). USA: IGI Global. [ISBN : 9781799880486]	
Ekta Gandotra	An Efficient Approach for Phishing Detection using Machine Learning	Kaiser J. Giri Shabir Ahmad Parah Rumaan Bashir Khan Muhammad, Multimedia Security: Algorithm Development, Analysis and Applications	Multimedia Security: Algorithm Development, Analysis and Applications (pp. 239-253). : Springer, Singapore. [ISBN : 978-981-15-8711-5]	
Hemraj Saini	Challenges and Opportunities with ECC and Noncommutative Cryptography: A Survey Perspective	Kumar A., MozarS., Lecture Notes in Electrical Engineering	Lecture Notes in Electrical Engineering (vol 698, pp.). : Springer, Singapore. [ISBN : 978-981-15-7960-8]	
Ekta Gandotra	Comparative Analysis of Machine Learning Methods for Classification of IoT Malware Attacks	Kumar R., Ahn C.W., Sharma T.K., Verma O.P., Agarwal A., Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems	Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems (vol 425, pp.). Singapore: Springer. [ISBN : 978-981-19-0707-4]	
Ekta Gandotra	Risk Detection of Android Applications Using Static Permissions	Verma, P., Charan, C., Fernando, X., Ganesan, S., Advances in Data Computing, Communication and Security	Advances in Data Computing, Communication and Security. (LNDECT, volume 106) (pp. 591-600). Singapore: Springer. [ISBN : 978-981-16-8403-6]	
Prateek Thakral	Meticulous Presaging Arrhythmia Fibrillation for Heart Disease Classification	Verma, P., Charan, C., Fernando, X., Ganesan, S., Advances in Data Computing, Communication and	Advances in Data Computing, Communication and Security (pp. 99-107). Singapore: Springer. [ISBN : ]	

	Using Oversampling Method for Multiple Classifiers Based on Machine Learning	Security	978-981-16-8403-6]	
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• **Conference Publications**

<b>Name of Faculty</b>	<b>Title of Article presented</b>	<b>Name of conference</b>	<b>Reference</b>	<b>Dates</b>
Ruchi Verma	Security in Big Data Health Care System	Proceedings of the 2021 Sixth International Conference on Image Information Processing (ICIIP)	Verma, R., & Bhatt, R. (2021, November). Security in Big Data Health Care System. In 2021 Sixth International Conference on Image Information Processing (ICIIP) (Vol. 6, pp. 551-555). IEEE.	26-28 Nov. 2021
Ravindra Bhatt	Security in Big Data Health Care System	Proceedings of the 2021 Sixth International Conference on Image Information Processing (ICIIP)	Verma, R., & Bhatt, R. (2021, November). Security in Big Data Health Care System. In 2021 Sixth International Conference on Image Information Processing (ICIIP) (Vol. 6, pp. 551-555). IEEE.	26-28 Nov. 2021
Ravindar a Bhatt	A Comparison Analysis of Heart Disease Dataset Using Decision Tree and Back-Propagation Network	Proceedings of the 2021 Sixth International Conference on Image Information Processing (ICIIP)	Kalta, S., & Bhatt, R. (2021, November). A Comparison Analysis of Heart Disease Dataset Using Decision Tree and Back-Propagation Network. In 2021 Sixth International Conference on Image Information Processing (ICIIP) (Vol. 6, pp. 556-561). IEEE.	26-28 Nov. 2021

Rakesh Kanji Shruti Jain	Design of Multi Chain Power Efficient Gathering for Sensor Information System Using Sink Mobility.	Proceedings of the 2021 Sixth International Conference on Image Information Processing (ICIIP)	Jain, S., & Kanji, R. (2021, November). Design of Multi Chain Power Efficient Gathering for Sensor Information System Using Sink Mobility. In 2021 Sixth International Conference on Image Information Processing (ICIIP) (Vol. 6, pp. 81-86). IEEE.	26-28 Nov. 2021
Shruti Jain	Design of Multi Chain Power Efficient Gathering for Sensor Information System Using Sink Mobility.	Proceedings of the 2021 Sixth International Conference on Image Information Processing (ICIIP)	Jain, S., & Kanji, R. (2021, November). Design of Multi Chain Power Efficient Gathering for Sensor Information System Using Sink Mobility. In 2021 Sixth International Conference on Image Information Processing (ICIIP) (Vol. 6, pp. 81-86). IEEE.	26-28 Nov. 2021
Ravindar a Bhatt	The Impact of Chronic Kidney Disease (CKD) Around the Globe: A Novel ML Solution	Proceedings of the International Conference on System Modeling & Advancement in Research Trends (SMART)	Pandey, G., & Bhatt, R. (2021, December). The Impact of Chronic Kidney Disease (CKD) Around the Globe: A Novel ML Solution. In 2021 10th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 685-690). IEEE.	10-11 Dec. 2021
Hari Singh	A Critical Analysis of Apache Hadoop and Spark for Big Data Processing	Proceedings of the International Conference on Signal Processing, Computing and Control (ISPCCC)	Sewal, P., & Singh, H. (2021, October). A Critical Analysis of Apache Hadoop and Spark for Big Data Processing. In 2021 6th International Conference on Signal Processing,	7-9 October 2021

			Computing and Control (ISPCC) (pp. 308-313). IEEE.	
Rajinder Sandhu	QoE-based Resource Management of Applications in the Fog Computing Environment using AHP Technique	Proceedings of the International Conference on Signal Processing, Computing and Control (ISPCC)	Varshney, S., Sandhu, R., & Gupta, P. K. (2021, October). QoE-based Resource Management of Applications in the Fog Computing Environment using AHP Technique. In 2021 6th International Conference on Signal Processing, Computing and Control (ISPCC) (pp. 669-673). IEEE.	7-9 Oct. 2021
Pradeep Kumar Gupta	QoE-based Resource Management of Applications in the Fog Computing Environment using AHP Technique	Proceedings of the International Conference on Signal Processing, Computing and Control (ISPCC)	Varshney, S., Sandhu, R., & Gupta, P. K. (2021, October). QoE-based Resource Management of Applications in the Fog Computing Environment using AHP Technique. In 2021 6th International Conference on Signal Processing, Computing and Control (ISPCC) (pp. 669-673). IEEE.	7-9 Oct. 2021
Hemraj Saini	Missing Values Imputation in Food Consumption: An Analytical Study	Proceedings of the International Conference on Signal Processing, Computing and Control (ISPCC)	Tripathi, A. K., Saini, H., & Rathee, G. (2021, October). Missing Values Imputation in Food Consumption: An Analytical Study. In 2021 6th International Conference on Signal Processing, Computing and Control (ISPCC) (pp. 303-307). IEEE.	7-9 Oct. 2021
Hemraj	An Enhanced	Proceedings of the	Sharma, S., & Saini,	7-9 Oct.

Saini	Clustering Algorithm for Agricultural Data Using FAO Heuristics	International Conference on Signal Processing, Computing and Control (ISPCC)	H. (2021, October). An Enhanced Clustering Algorithm for Agricultural Data Using FAO Heuristics. In 2021 6th International Conference on Signal Processing, Computing and Control (ISPCC) (pp. 228-232). IEEE.	2021
Hemraj Saini	Intrusion Detection Systems: Conceptual Study and Review	Proceedings of the International Conference on Signal Processing, Computing and Control (ISPCC)	Vij, C., & Saini, H. (2021, October). Intrusion Detection Systems: Conceptual Study and Review. In 2021 6th International Conference on Signal Processing, Computing and Control (ISPCC) (pp. 694-700). IEEE.	7-9 Oct. 2021
Pradeep Kumar Gupta	Functional Brain Image Clustering and Edge Analysis of Acute Stroke Speech Arrest MRI	Proceedings of the Thirteenth International Conference on Contemporary Computing (IC3-2021)	Saurabh, S., & Gupta, P. K. (2021, August). Functional Brain Image Clustering and Edge Analysis of Acute Stroke Speech Arrest MRI. In 2021 Thirteenth International Conference on Contemporary Computing (IC3-2021) (pp. 234-240).	August 5 - 7, 2021
Vivek Kumar Sehgal	A Context Aware Recommender System for Predicting Crop Factors using LSTM	Proceedings of the 2021 Asian Conference on Innovation in Technology (ASIANCON)	Gill, H. K., Sehgal, V. K., & Verma, A. K. (2021, August). A Context Aware Recommender System for Predicting Crop Factors using LSTM. In 2021 Asian Conference on Innovation in Technology (ASIANCON) (pp. 1-4). IEEE.	27-29 Aug. 2021

Vivek Kumar Sehgal	Sleep Quality and Best Posture Prediction using Contextual Body Sensors using LSTM	Proceedings of the 2021 Asian Conference on Innovation in Technology (ASIANCON)	Gill, H. K., Sehgal, V. K., & Verma, A. K. (2021, August). Sleep Quality and Best Posture Prediction using Contextual Body Sensors using LSTM. In 2021 Asian Conference on Innovation in Technology (ASIANCON) (pp. 1-4). IEEE.	27-29 Aug. 2021
Vivek Kumar Sehgal	Temperature Management Using Smart Thermostat in Cyber Physical Systems	Proceedings of the IEEE Delhi Section Conference (DELCON)	Thakur, P., & Sehgal, V. K. (2022, February). Temperature Management Using Smart Thermostat in Cyber Physical Systems. In 2022 IEEE Delhi Section Conference (DELCON) (pp. 1-5). IEEE.	11-13 Feb. 2022
Pradeep Kumar Gupta	On Continuous Integration / Continuous Delivery for Automated Deployment of Machine Learning Models using MLOps	Proceedings of the International Conference on Artificial Intelligence and Knowledge Engineering (AIKE)	Garg, S., Pundir, P., Rathee, G., Gupta, P. K., Garg, S., & Ahlawat, S. (2021, December). On continuous integration/continuous delivery for automated deployment of machine learning models using mlops. In 2021 IEEE fourth international conference on artificial intelligence and knowledge engineering (AIKE) (pp. 25-28). IEEE.	1-3 Dec. 2021
Vivek Kumar Sehgal	Prediction of Breast Cancer using Machine Learning Techniques	2022 Fourteenth International Conference on Contemporary Computing (IC3)	Parthh Dikshit, Bhawna Dey, Ayush Shukla, Akhilesh Singh Tarankit Chadha, Vivek Kumar Sehgal	

- Guest Speakers/Lectures/ Visits**

**Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Vivek Kumar Sehgal	Professor	Percolation threshold calculation in polymerization using machine learning	08.06.2022 11:30 AM-1.00 PM	National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh
Vivek Kumar Sehgal	Professor	Role of photonic network on chip in smart industries	08.06.2022 2:30 PM-4.00 PM	National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh

- Composition of Various Bodies**

**Composition of BOARD OF STUDIES: Dept of CSE and IT, November 10, 2021**

S N o	Category	Nomination		Name	Profession	Affiliation	Date of Constitution
1	Head of the Department	Chairperson	1	Prof. Dr. Vivek Kr. Sehgal	Professor	JUIT Waknaghat	Nov 10, 2021
2	Faculty members at different levels covering different specializations. At least five faculty members at different levels covering different specializations, to be nominated by the Academic Council	Members	2	Dr. Hemraj Saini	Associate Prof	JUIT Waknaghat	
			3	Dr. P. K. Gupta	Associate Prof	JUIT Waknaghat	
			4	Dr. Ravindra Bhatt	Associate Prof	JUIT Waknaghat	
			5	Dr. Pardeep Kumar	Associate Prof	JUIT Waknaghat	
			6	Dr. Rajni Mohana	Associate Prof	JUIT Waknaghat	
			7	Dr. Amol Vasudeva	Asst Prof	JUIT Waknaghat	
			8	Dr. Yugal Kumar	Asst Prof	JUIT Waknaghat	
			9	Dr. Ekta Gupta	Asst Prof	JUIT Waknaghat	
			10	Dr. Rajinder Singh Sandhu	Asst Prof	JUIT Waknaghat	

			11	Dr. Hari Singh	Asst Prof	JUIT Waknaghat	
			12	Dr. Jagpreet Sidhu	Asst Prof	JUIT Waknaghat	
			13	Dr. Mrityunjay Singh	Asst Prof	JUIT Waknaghat	
3	Subject experts from outside the University nominated by the Academic Council. Two experts in the subject from outside the University to be nominated by the Academic Council	Members	14	Prof. Dr Manu Sood	Professor	HP University, Shimla	Nov 10, 2021
			15	Prof. Dr. Suchita Upadhyay	Professor	Kurukshetra University Kurukshetra	
			16	Prof. Dr. Himanshu Aggarwal	Professor	Punjabi University, Patiala	
4	Representatives from industry/corporate sector/allied area relating to placement by Academic Council. One representative from industry/corporate sector/allied area relating to placement, to be nominated by the Academic Council	Members	17	Dr. Dheeraj Chahal	Research team lead R&D and Consultant at TCS Innovation Lab	TCS Innovation Lab Pune, India	Nov 10, 2021
			18	Mr. Saurabh Sud	Manager - Cyber Security	UBER, Hyderabad	
5	Postgraduate meritorious alumnus nominated by the VC. One postgraduate meritorious alumnus to be nominated by the VC.	Members	19	Dr. Rajkumar Tekchandani	Asst Prof	Thapar University	Nov 10, 2021
6	Co-opted members. The Chairperson, Board of Studies May with the approval of the	Members	20	Prof. Dr. Ashish Kumar	Professor & HoD	Dept of CE, JUIT	Nov 10, 2021
			21	Prof. Dr. Karanjeet Singh	Professor & HoD	Dept of Maths, JUIT	



	VC, Co-opt as member, Experts from outside the University/members of the same faculty, whenever special courses of studies are to be formulated		22	Prof. Dr. P B Burman	Professor &HoD	Dept of Physics & Material Science, JUIT	
			23	Prof. Dr. Sudhir Syal	Professor &HoD	Dept of BT/BI, JUIT	
			24	Dr. Rajiv Kumar	Associate Prof &HoD	Dept of ECE, JUIT	
			25	Dr. Anupriya Kaur	Associate Prof &HoD	Dept of HSS, JUIT	

## **DEPARTMENT OF BIOTECHNOLOGY & BIOINFORMATICS**

- **Department Vision and Mission**

- **Vision:**

To produce Biotechnology and Bioinformatics professionals with leadership quality in technology, creativity, innovation, and entrepreneurship

- **Mission:**

**DM1:** To provide state of the art outcome-based teaching/learning practices

**DM2:** To develop a research-based education model in Biotechnology & Bioinformatics

**DM3:** To harness human capital for sustainable competitive edge and social relevance

- **Faculty Details**

S. No.	Name	Qualification	Specialization
1.	Prof. (Dr.) Sudhir Kumar	PhD	Environmental Biotechnology – Bioremediation, Biofuels
2.	Dr. Anil Kant Thakur	PhD	Plant Biotechnology, Molecular Biology
3.	Dr. Gopal Singh Bisht	PhD	Medicinal Chemistry, Peptides and Peptidomimetics
4.	Dr. Hemant Sood	PhD	Plant Biotechnology and IPR
5.	Dr. Jata Shanker	PhD	Fungal biology, Functional genomics
6.	Dr. Jitendraa Vashist	PhD	Bacterial Resistance, Clinical Proteomics
7.	Dr. Poonam Sharma	PhD	Chemistry
8.	Dr. Rahul Shrivastva	PhD	Microbial Pathogenesis, Mycobacteriology
9.	Dr. Tiratha Raj Singh	PhD	Bioinformatics, Functional genomics, Molecular Evolution and Systems Biology
10.	Dr. Udayabanu M.	PhD	Neuropharmacology
11.	Dr. Vijay Kumar Garlapati	PhD	Bioprocess Engineering
12.	Dr Ashok Nadda	PhD	Bioenergy/Biopolymer/Enzyme Technology/Biocatalysis

13.	Dr. Saurabh Bansal	PhD	Protein engineering, Enzymology, Industrial Biotechnology
14.	Dr. Abhishek Chaudhary	PhD	Nanobiotechnology
15.	Dr. Raj Kumar	PhD	Bioinformatics
16.	Dr. Shikha Mittal	PhD	Bioinformatics, Next generation Sequencing

- **Programs:**

- **Undergraduate Programs**

- The program is designed to provide hands on training through appropriate laboratory courses to make better understanding of the theory courses.
- The course curriculum encompasses courses from core Biotechnology, Bioinformatics, Mathematics, Physics and Material Sciences, Electronics & Communication, Computer Science Engineering, Humanities & Social Sciences.
- Elective modules, proficiencies and minor specializations are offered in the course curriculum to strengthen and specialize students' knowledge (theoretical and practical) in their area of interest.
- The students are encouraged to participate in various extra-curricular and co-curricular activities for developing leadership, communication, critical thinking and problem solving skills.
- The students are encouraged to participate in various bio-entrepreneurial activities through entrepreneurship cell and Bio-club 'Synapse' for developing their business and entrepreneurial skills.
- Summer Internships with industry projects is a mandatory component.
- Two undergraduate programs are currently conducted by the Department:
  - **B. Tech (Biotechnology)**
  - **B. Tech (Bioinformatics)**

- **NBA Accreditation**

The Department of Biotechnology and Bioinformatics was granted extension of NBA accreditation by National Board of Accreditation (NBA) till 30 June 2022.

### **Course Structure**

The scheme of Biotechnology and Bioinformatics was revised in 2018 (160 credits), detailed course structure is as:-

S No	Course Name	Course Code
<b>BTECH(BIOTECHNOLOGY\BIOINFORMATICS) 1<sup>st</sup> SEMESTER</b>		
1	English and Technical Communication	18B11HS111
2	English and Technical Communication Lab	18B17HS171
3	Basic Mathematics -1 OR	18B11MA112
4	Fundamental Biology	18B11BT111
5	Fundamental Biology lab	18B17BT171
6	Basic Engineering Physics-I	18B11PH112
7	Programming for Problem Solving	18B11CI111
8	Engineering Graphics	18B17GE173
9	Basic Engineering Physics Lab-I	18B17PH172
10	Programming for Problem Solving Lab	18B17CI171
<b>BTECH (BIOTECHNOLOGY\BIOINFORMATICS) 2<sup>nd</sup> SEMESTER</b>		
1	Basic Mathematics-II	18B11MA212
2	Bioinstrumentation Techniques	18B11PH212
3	Basic Electrical Sciences	18B11EC212
4	Basic Electrical Sciences lab	18B17EC272
5	Data Structure & Algorithms	18B11CI211

6	Data Structure & Algorithms Lab	18B17CI271
7	Workshop Practices	18BI7GE171
<b>BTECH (BIOTECHNOLOGY) 3<sup>rd</sup> SEMESTER</b>		
1	Interpersonal Dynamics Values and Ethics	18B11HS311
2	Probability & Statistical Techniques	18B11MA312
3	Genetics	18B11BT311
4	Biochemistry	18B11BT312
5	Thermodynamics & Chemical Processes	18B11BT313
6	General Chemistry	18B11BT314
7	Genetics Lab.	18B17BT371
8	Biochemistry Lab	18B17BT372
9	Thermodynamics & Chemical Processes lab	18B17BT373
10	General Chemistry Lab	18B17BT374
<b>BTECH (BIOTECHNOLOGY) 4<sup>th</sup> SEMESTER</b>		
1	Finance and Accounts	18B11HS411
2	Cell Biology and Culture Technologies	18B11BT411
3	Molecular Biology	18B11BT412
4	Introduction to Bioinformatics	18B11BT413
5	Microbiology	18B11BT414
6	Cell Biology and Culture Technologies lab	18B17BT471
7	Molecular Biology Lab	18B17BT472
8	Introduction to Bioinformatics lab	18B17BT473
9	Microbiology Lab	18B17BT474
10	Environmental Studies	18B11GE411

<b>BEECH (BIOTECHNOLOGY) 5<sup>th</sup> SEMESTER</b>		
1	Project Management and Entrepreneurship	18B11HS511
2	Bioprocess Engineering	18B11BT511
3	Genetic Engineering	18B11BT512
4	Immunology	18B11BT513
5	Bioprocess Engineering Lab	18B17BT571
6	Genetic Engineering Lab	18B17BT572
7	Immunology Lab	18B17BT573
8	Departmental Elective-I	
9	Minor Project Part-I	18B19BT591
<b>BTECH (BIOTECHNOLOGY) 6<sup>th</sup> SEMESTER</b>		
1	Downstream Processing	18B11BT611
2	Food and Agricultural Biotechnology	18B11BT612
3	Downstream Processing Lab.	18B17BT671
4	Food and Agricultural Biotechnology Lab	18B17BT672
5	Departmental Elective- II	
6	Departmental Elective-III	
7	Open Elective-I	
8	Open Elective-II	
9	Minor Project Part-II	18B19BT691
10	Industrial Training	
<b>BTECH (BIOTECHNOLOGY) 7<sup>th</sup> SEMESTER</b>		
1	Departmental Elective- IV	
2	Open Elective – III	
3	Open Elective – IV	

4	Major Project Part I	18B19BT791
5	Indian Constitution	
<b>BTECH (BIOTECHNOLOGY) 8<sup>th</sup> SEMESTER</b>		
1	Departmental Elective- V	
2	Departmental Elective- VI	
3	Open Elective-V	
4	Major Project Part II	18B19BT891
<b>PROFESSIONAL ELECTIVES</b>		
1	Phytopharmaceuticals and Biologicals	18B1WBT531
2	Comparative & Functional Genomics	18B1WBT532
3	Peptide Therapeutics	18B1WBT631
4	Infectious Diseases	18B1WBT632
5	Nano-Biotechnology	18B1WBT633
6	Bioenergy & Biofuels	18B1WBT634
7	Industrial Enzymes Technologies	18B1WBT733
8	Intellectual Property Rights & Commercialization	18B1WBT734
9	Genetic Counselling	18B1WBT831
10	Traditional Bioprocessing & Their Up Scaling	18B1WBT832
11	Diagnostics & Vaccine Manufacture	18B1WBT833
12	NGS Data Analysis & Applications	18B1WBI834
<b>OPEN ELECTIVES</b>		
13	Biology for Engineers	18B1WBT635
14	Industrial Chemistry	18B1WBT636
15	Sustainable Technologies for Waste Management	19B1WBT731
16	Food Nutrition & Health Care	19B1WBT732

<b>BIOINFORMATICS</b>		
<b>1<sup>ST</sup> AND 2<sup>ND</sup> SEMESTER IS SAME FOR BOTH BT &amp; BI</b>		
<b>BTECH (BIOINFORMATICS) 3<sup>rd</sup> SEMESTER</b>		
1	Interpersonal Dynamics Values and Ethics	18B11HS311
2	Cell and Molecular Biology	18B11BI311
3	Bioinformatics Data Management	20B11BI311
4	Microbiology & Immune System	18B11BI312
5	Biological Computation	18B11BI313
6	Bioinformatics Data Management Lab	20B17BI371
7	Cell and Molecular Biology Lab	18B17BI371
8	Microbiology & Immune System Lab	18B17BI372
9	Biological Computation Lab	18B17BI373
10	Linux Lab	18B17BI374
<b>BTECH (BIOINFORMATICS) 4<sup>th</sup> SEMESTER</b>		
1	Finance and Accounts	18B11HS411
2	Bio-Statistics	18B11MA411
3	Genetic Engineering and Genomics	18B11BI412
4	Object Oriented Programming	18B11CI415
5	Structural Biology	18B11BI413
6	Programming Languages for Bioinformatics	18B11BI414
7	Object Oriented Programming Lab	18B11CI474
8	Bio-Statistics Lab	18B11MA412
9	Genetic Engineering and Genomics Lab	18B17BI472
10	Structural Biology Lab	18B17BI473
11	Programming Languages for Bioinformatics Lab	18B17BI474



12	Environmental Studies	18B11GE411
<b>BTECH (BIOINFORMATICS) 5<sup>th</sup> SEMESTER</b>		
1	Project Management and Entrepreneurship	18B11HS511
2	Design and Analysis of Algorithms	18B11BI511
3	Bioprocess Engineering	18B11BT511
4	Scripting Languages for Bioinformatics	18B11BI512
5	Design and Analysis of Algorithms Lab	18B17BI571
6	Bioprocess Engineering Lab	18B17BT571
7	Scripting Languages for Bioinformatics Lab	18B17BI572
8	Structural Bioinformatics Lab	18B17BI573
9	Departmental Elective-I	
10	Open Elective-I	
11	Minor Project Part-I	18B19BI591
<b>BTECH (BIOINFORMATICS) 6<sup>th</sup> SEMESTER</b>		
1	Machine Learning for Bioinformatics	18B11BI611
2	Computer Aided Drug Design	18B11BI612
3	Machine Learning for Bioinformatics lab	18B17BI671
4	Computer Aided Drug Design Lab	18B17BI672
5	Advanced Algorithms for Bioinformatics Lab	18B17BI673
6	R Language Lab	18B17BI674
7	Departmental Elective-II	
8	Departmental Elective-III	
9	Open Elective-II	
10	Minor Project Part-II	18B19BI691
11	Industrial Training	

<b>BTECH (BIOINFORMATICS) 7<sup>th</sup> SEMESTER</b>		
1	Departmental Elective- IV	
2	Open Elective – III	
3	Open Elective – IV	
4	Major Project Part I	18B19BI791
5	Indian Constitution	
<b>BTECH (BIOINFORMATICS) 8<sup>th</sup> SEMESTER</b>		
1	Departmental Elective- V	
2	Departmental Elective- VI	
3	Open Elective-V	
4	Major Project Part II	18B19BI891
<b>PROFESSIONAL ELECTIVES</b>		
1	Structural Bioinformatics	18B1WBI531
2	Comparative & Functional Genomics	18B1WBT532
3	Advanced Algorithms for Bioinformatics	18B1WBI631
4	Infectious Diseases	18B1WBT632
5	Datawarehousing and Mining for Bioinformatics	18B1WBI632
6	Bioenergy & Biofuels	18B1WBT634
7	Computational Systems Biology	18B1WBI731
8	Intellectual Property Rights & Commercialization	18B1WBT734
9	Genetic Counselling	18B1WBT831
10	Computational Molecular Evolution	18B1WBI831
11	Diagnostics & Vaccine Manufacture	18B1WBT833
12	NGS Data Analysis & Applications	18B1WBI834

- **Post Graduate Programs**

- **MTech Biotechnology**
- **MSc Biotechnology**
- **MSc Microbiology**

**Course Structure**

<b>M.Tech. Biotechnology Course Curriculum (76 credits)</b>		
<b>S No</b>	<b>Course Name</b>	<b>Course Code</b>
<b>1<sup>st</sup> SEMESTER</b>		
1	Advances in Molecular Cell Biology	13M11BT111
2	Advances in Molecular Cell Biology Lab	13M17BT171
3	Research Methodology and Ethics	18M11BT113
4	Patenting in Biotechnology	18M11BT114
5	Advanced Bioinformatics	13M11BT112
6	Advanced Bioinformatics Lab	13M17BT172
7	High Throughput Technologies	13M11BT114
8	DE-1	
9	DE-II	
<b>2<sup>nd</sup> SEMESTER</b>		
1	Industrial Biotechnology	14M11BT211
2	Industrial Biotechnology Lab	14M17BT271
3	Immunotechnology	14M11BT212
4	Immunotechnology Lab	14M17BT272
5	Bioenterpreunership Management	14M11BT214
6	Functional Genomics	14M11BT213
7	Functional Genomics Lab	14M17BT273
8	Metabolic Engineering	14M11BT215

9	DE-III	-
10	DE-IV	-
<b>3<sup>rd</sup> SEMESTER</b>		
1	Seminar-I	14M19BT392
2	Project- Thesis Part I	14M19BT391
<b>4<sup>th</sup> SEMESTER</b>		
1	Seminar-II	21M19BT491
2	Project- Thesis Part II	15M19BT491
<b>MTech Biotechnology Electives courses:</b>		
1	Food Processing & Engineering	20M1WBT131
2	Plant Tissue Culture Technologies	20M1WBT132
3	Advances in Computational System Biology	18M1WBT133
4	Microbial Ecology	18M1WBT134
5	Vaccine Production	20M1WBT133
6	QC Analysis and Management	20M1WBT231
7	Clinical Diagnostics	20M1WBT234
8	Plant Biotechnology	11M1WBT433
9	Advances in Gene manipulations	20M1WBT134
10	Industrial Enzyme Technology	20M1WBT232
11	Nano Biotechnology	11B1WBT840

**MSc Biotechnology Course Structure (94 credits)**

<b>S No</b>	<b>Course Name</b>	<b>Course Code</b>
<b>1<sup>st</sup> SEMESTER (MS1)</b>		
1	Biochemistry-MI	20MS1BT111
2	Cell and Molecular Biology-MI	20MS1BT112
3	Plant and Animal Biotechnology-MI	20MS1BT113
4	Microbiology-MI	20MS1BT114
5	Genetics-MI	20MS1BT115
6	Basics of Mathematics and Statistics-MI	20MS1MA111
7	Basics of Chemistry and Physics-MI	20MS1PH111
8	Laboratory I: Biochemistry and Analytical Techniques-MI	20MS7BT171
9	Laboratory II : Microbiology-MI	20MS7BT173
10	Laboratory III: Plant and Animal Biotechnology-MI	20MS7BT172
<b>2<sup>nd</sup> SEMESTER (MS2)</b>		
1	Genetic Engineering-MII	20MS1BT211
2	Immunology-MII	20MS1BT212
3	Bioinformatics-MII	20MS1BT213
4	Genomics and Proteomics-MII	20MS1BT214
5	Molecular Diagnostics-MII	20MS1BT215
6	Research Methodology and Scientific Communication Skills-MII	20MS1BT216
7	Elective-I-MII	
8	Seminar-I-MII	20MS9BT211
9	Laboratory IV: Molecular Biology and Genetic Engineering-MII	20MS7BT271

10	Laboratory V: Immunology-MII	20MS7BT272
<b>3<sup>rd</sup> SEMESTER (MS3)</b>		
1	Bioprocess Engineering and Technology-MIII	20MS1BT311
2	Emerging Technologies-MIII	20MS1BT312
3	Critical Analysis of Classical Papers-MIII	20MS9BT312
4	Bioentrepreneurship-MIII	20MS1BT314
5	Intellectual Property Rights, Biosafety and Bioethics-MIII	20MS1BT315
6	Project Proposal Preparation and Presentation-MIII	20MS9BT313
7	Seminar-II-MIII	20MS9BT311
8	Laboratory VI: Bioprocess Engineering and Technology–MIII	20MS7BT371
9	Laboratory VII: Bioinformatics-MIII	20MS7BT372
10	Dissertation-MIII	20MS9BT391
<b>4<sup>th</sup> SEMESTER (MS4)</b>		
1	Dissertation-MIV	20MS9BT491
2	Elective-II-MIV	
<b>MSc Biotechnology Electives courses:</b>		
1	Nanobiotechnology-MII	20MSWBT231
2	Environmental Biotechnology-MII	20MSWBT232
3	Protein Engineering-MII	20MSWBT233
4	Vaccines-MIV	20MSWBT431
5	Drug Discovery and Development-MIV	20MSWBT432
6	Computational Systems Biology-MIV	20MSWBT433

### MSc Microbiology Course Structure (75 credits)

S.No.	Subject	Course Code
<b>1<sup>st</sup> SEMESTER (MB1)</b>		
1	General Microbiology and Bacteriology	21MS1MB111
2	Basics of Mathematics and Statistics	20MS1MA111
3	Biochemistry	20MS1BT111
4	Molecular Biology	21MS1MB112
5	Virology	20B1WBI831
6	Fungal Biology	21MS1MB113
7	General Microbiology and Bacteriology Lab	21MS7MB171
8	Biochemistry Lab	20MS7BT171
9	Molecular Biology Lab	21MS7MB172
10	GLP and Bioinstrumentation Lab	21MS7MB173
<b>2<sup>nd</sup> SEMESTER (MB2)</b>		
1	Immunology and Immunotechnology	18MS1BT211
2	Enzymes and Bioprocess Technology	21MS1MB211
3	Microbial Genetics and Physiology	21MS1MB212
4	Recombinant DNA Technology	18MS1BT313
5	Bioinformatics	20MS1BT213
6	Immunology and Immunotechnology Lab	18MS7BT211
7	Enzymes and Bioprocess Technology Lab	21MS7MB271
8	Basic Bioinformatics Lab	18MS7BI214
9	Recombinant DNA Technology lab	18MS7BT373
10	Masters Research Review seminar	18MS9BI211
<b>3<sup>rd</sup> SEMESTER (MB3)</b>		
1	Environmental Microbiology	21MS1MB311
2	Diagnostic Microbiology and vaccines	21MS1MB312
3	Elective-I	
4	Master's Dissertation & Thesis Part-I	21MS9MB311
<b>4<sup>th</sup> SEMESTER (MB4)</b>		
1	Food & Dairy Microbiology MBIV	21MS1MB411
2	Plant and Agricultural Microbiology MBIV	21MS1MB412
3	Elective-II	
4	Master's Research Thesis Part-II	21MS9MB411
<b>M.Sc. Microbiology Electives courses</b>		
1	IPR, Biosafety and Bioethics	21MS2MB311
2	Biosensors: Principles & Applications	21MS2MB312
3	Computational Systems Biology	21MS2MB411
4	Protein Engineering	21MS2MB314
5	Microbial Toxicology	21MS2MB313
6	Experimental models in microbial Research	21MS2MB412

7	Nano-Biotechnology	21MS2MB413
8	QC Analysis and Management	21MS2MB414

### **PhD Program**

- Doctoral Degree Program in Biotechnology
- Doctoral Degree Program in Bioinformatics

The following courses are available for Ph.D. students

<b>S No</b>	<b>Course Title</b>	<b>Course Code</b>
1	Ethics, Intellectual Property Issues and Plagiarism	17P1WGE102
2	Literature Survey	17P1WGE101
3	Research Methodologies.	18P1WGE101
4	Advances in Computational System Biology	18M1WBT133
5	High Throughput Technologies	13M11BT114
6	Industrial Enzyme Technologies	18M1WBT131
7	Plant Tissue Culture Technologies	18M1WBT132
8	Bioprocess Engineering and Technology	20MS1BT311
9	Bioprocess Engineering and Technology Lab	20MS7BT371
10	Microbiology	20MS1BT114
<b>Electives</b>		
1	Applied Environmental Biotechnology	18M1WBT231
2	Comprehensive test	17P1WBT131
3	Nanobiotechnology: Concept and Applications	18M1WBT232
4	Advance in Computational Molecular Evolution	18M1WBT233
5	Industrial Biotechnology	14M11BT211



- **PhD Completed (2021-2022)**

S.No	Name	Program	Title of Thesis
1.	Vikrant Abbot 176552	PhD Biotechnology	Physico-Chemical Study of Flavonoid-Surfactant Interaction: Utilization in Neomycin Topical Formulation
2	Swati Sharma 176554	PhD Biotechnology	Microalgae-based Bioremediation of Radiographic X-ray Developer Solution

**New PhD Students Enrolled**

S.No.	Roll No.	Name
1	216551	Kartic
2	216553	Raja Adnan Butt

- **Infrastructural Strengths**

The Department has been equipped with 3 Bioinformatics Labs with high end servers, Sun Work Stations and IBM Machines installed with several bioinformatics software packages such as Discovery Studio and DNASTAR for educating students in algorithm design, bio-programming & scripting languages, computational drug designing, development of biological databases, advanced chemo-informatics, etc. The Department has 21 state-of-the-art modern biotech laboratories such as Proteomics Technology lab, Genomic Technologies lab, Plant Biotechnology Lab, Microbial Biotechnology lab, Animal & Plant Cell Culture labs, Animal house, Environmental Biotechnology Lab, Industrial Biotechnology lab, Fermentation Technology lab and High End Instrumentation lab.

- **Centre of Excellence**

Two Centres of Excellence were established in the Department by a decision from the Academic Council in its meeting held on 2nd Dec., 2017.

**1. Centre of Excellence in Healthcare Technologies and Informatics (CEHTI):** The Centre is working with the following objectives:

- Carry out training activities that are concentrated in the field of health information of national importance and strategic dimension.
- Enabling a scientific research environment, in order to enable researchers, graduate, postgraduate, and PhD students to conduct innovative research and develop advanced technologies to assume its leader in the field of biomedical and health informatics.

- Strengthen cooperation in the areas of health informatics between national and international universities and other centres of excellence.
- Working to submit projects that are emanating from the distinguished research ideas in the field of health informatics, in order to benefit health sectors.

**2. Centre Of Excellence In Sustainable Technologies For Rural Development (CESTRD):**The Centre is working with the following objectives:

- General awareness program for the rural youth, women and children of the rural areas on interactive basis.
- To survey and analyze the problems in planning and implementation of the Government schemes & programs for rural development.
- To run the innovative training workshops, seminars, disseminate information and transfer technology (Biogas, vermicompost, biomass Briquettes) to the rural people in an integrated sustainable mode of rural development.
- To make rural people aware about education especially vocational trainings to make earnings other than agriculture.

• **Lab Staff with Qualification**

Name	Designation	Qualification
Sh. Mohd. Ismail Siddiqui	Sr. Lab Engineer	MSc
Ms. Somlata Sharma	Sr. Lab Engineer	MSc-IT
Sh. Baleshwar Prasad	Sr. Lab Technician	MSc
Ms. Mamta Mishra	Lab Technician	MSc
Ms. Sonika Gupta	Lab Technician	DPharma

• **Research Projects Sanctioned during the Years 2020-2021/ In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned (In Lakhs)	Duration	Current Status
1	Dr. Tiratha Raj Singh	Identification, Inhibition mechanism analysis and validation of novel multi-target inhibitors for Alzheimer's disease using polypharmacology and systems pharmacology approaches	ICMR	13.66	2019-22	Ongoing
2	Dr. Sudhir Kumar, Dr. Rahul Shrivastava, Dr. Gopal Singh Bisht	DBT Skill Vigyan Project	DBT	49.8	2019-22	Ongoing
3	Dr. Anil Kant	Proposal for postgraduate teaching program	DBT Govt Of India	130.0	2020-25	Ongoing
4	Dr. Rahul Shrivastava and Dr. Jitendraa Vashist	Identification of biofilm associated genes/ proteins of atypical mycobacteria <i>Mycobacterium fortuitum</i> as potential drug target and inhibitors thereof	ICMR	11.6	-	Approved
5	Dr Shikha Mittal	Germplasm characterization and trait discovery in wheat using genomics approaches and its integration for	DBT	862.0	2020-2025	Ongoing

		improving climate resilience, productivity and nutritional quality				
6	Dr. Ashok Kumar Nadda & Dr. Poonam Sharma	Extraction of keratin from poultry waste biomass and its application in the production of value added products	DEST	7.6	2021-2023	Ongoing
7	Dr. Sudhir Kumar and Dr. Ashish Kumar (from CE dept.)	Pine needles' conversion to biofuels for rural empowerment	Jaypee Innovation Fund	7.0	2022-2024	Ongoing

- **Conferences, Seminars and Workshops/Faculty development program**

**Conferences:**

- **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
22-23 June 2022	Uttarakhand Science Congress	Graphic Era University, Dehradun, UK	Prof. Sudhir Kumar	Invited Speaker
27 May 2022	National Conference on Current Scientific Innovations & Research in Plant Biology - Plenary Lecture	Eternal University, Baru Sahib, Sirmour	Prof. Sudhir Kumar	Plenary lecture: Prof. Sudhir Kumar
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT	Deptt. BT & BI, JUIT Waknaghat	Prof. Sudhir Kumar	Coordinator

	Waknaghat			
25-27 Sept 2021	BIT's 13th Anniversary of Proteins and Peptide Conference 2021 organized by BIT Congress Inc. China	Online, Dalian, China	Dr. Saurabh Bansal	Video presentation
19-20 Nov 2021	International Conference on Nurturing innovative Technological Trends in Engineering Bioscience (NITTE-BIO) 2021, organized by NMAM Institute of Technology, Udupi, Karnataka	Online, Department of Biotechnology Engineering, NMAM Institute of Technology, Udupi, Karnataka	Dr. Saurabh Bansal	Attendee
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Saurabh Bansal	Chaired a session
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Hemant Sood	Chaired a session
07-08 Oct 2021	6th International Conference on signal processing, computing and control (ISPCC2K21)" the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Waknaghat, Himachal Pradesh, India.	Deptt.ECE, JUIT Waknaghat	Dr. Hemant Sood	Chaired a session
06-07 May 2022	3rd International Modern Scientific Research Congress organised by Istanbul Gedik University,	Istanbul Gedik University, Istanbul, Turkey	Dr. Hemant Sood	Oral presentation

	Istanbul, Turkey			
23-24 May 2022	4th International Conference on “Challenges in Chemical and Biochemical Engineering for Sustainable Development (CBSD)” at Annamalai University Tamilnadu	Annamalai University Tamilnadu	Dr. Hemant Sood	Oral presentation
25-26 Mar 2022	International Symposium on Deliberations on Rethinking the Environment: Sustainability in the Modern Era organized by DME law School Noida with University of Santiago de Compostela, Spain and United Nations Environment Programme(UNEP)	DME Law School ,Noida	Dr. Hemant Sood	Oral presentation
25-26 Sept 2021	Multi-Disciplinary Approaches for Development of Agriculture and Allied Sectors in Global Scenario in International (Online) Conference Agriculture, Biological and Life Sciences (ICABLS-2021) Organized by Vidya Kutir Foundation, New Delhi, India	Vidya Kutir Foundation, New Delhi, India	Dr. Hemant Sood	Oral presentation
07-08 Oct 2021	6th International Conference on signal processing, computing and control (ISPCC2K21)” the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Waknaghat, Himachal Pradesh, India.	Deptt.ECE, JUIT Waknaghat	Dr. Poonam Sharma	Chaired a session
27 July 2021	National Conference (Virtual Mode) on Current Advances in Material Sciences Research (CAMSR-2021)	Department of Chemistry, JCDAV College, Dasuya, Distt. Hoshiarpur	Dr. Poonam Sharma	Poster presentation
27-28 May 2022	National Conference on "Natural Sciences: Exploration through	Maharaja Agrasen University, Himachal Pradesh.	Dr. Poonam Sharma	Poster presentation

	Innovations"			
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Abhishek Chaudhary	Chaired a session and Secretary
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Raj Kumar	Chaired a session and Conference Abstract book editor
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Ashok Kumar Nadda	Organizing Secretary
07-08 Oct 2021	6th International Conference on signal processing, computing and control (ISPCC2K21)" the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Waknaghat, Himachal Pradesh, India.	Deptt. ECE, JUIT Waknaghat	Dr. Jata Shankar	Chaired a session
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment"	Deptt. BT & BI, JUIT Waknaghat	Dr. Jitendraa Vashist	Chaired a session

	Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat			
07-08 Oct 2021	6th International Conference on signal processing, computing and control (ISPCC2K21) the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Waknaghat, Himachal Pradesh, India.	Deptt.ECE, JUIT Waknaghat	Dr. Jitendraa Vashistt	Chaired a session
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Anil Kant	Chaired a session
24-25 Nov 2021	Suhani Bhagta, Kamal Kumar Bhardwaj, Reena Gupta and Anil Kant Thakur 2021, Optimization of cultural conditions for the esterase production from bacterial isolate EST4. In: Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Anil Kant	Oral presentation
23-26 Mar 2022	Suhani Bhagta, Sundaresha Siddappa and Anil Kant 2022, First report of dsRNA uptake study of	SKN Agriculture University, Jobner-Jaipur, Rajasthan, India	Dr. Anil Kant	Oral presentation



	Venturia inequalis Apple scab causing fungus by using in vitro synthesised GFP dsRNA. In: IPS 8th International Conference (Hybrid Mode): Plant Pathology: Retrospect and Prospects.; March 23-26, 2022, SKN Agriculture University, Jobner-Jaipur, Rajasthan, India			
6-7 May 2022	Sundresha Siddapa, Divyansh Bhadiar Suhani Bhagta and Anil Kant 2022, CRISPR based detection of Tomato Leaf Curl New Delhi Virus (ToLCNDV) in Potato, In: National Symposium on Novel Strategies in Plant Stress Diagnosis and Management, at Dr YS Parmar University of Horticulture & Forestry Nauni -173230 Solan (HP) INDIA May 6-7, 2022, Organized by Himalayan Phytopathological Society & Department of Plant Pathology	Organized by Himalayan Phytopathological Society & Department of Plant Pathology, Dr YSP, UHF, Nauni Solan	Dr. Anil Kant	Presented a poster
7-9 Oct 2021	6th International conference on 'Signal Processing, Computing and Control (ISPCC-2k21)', sponsored by IEEE Delhi section (Record No # 53510), on October 07 -09, 2021 at Jaypee University of Information Technology, Waknaghat, Solan, H.P.	Sponsored by IEEE Delhi section, At Jaypee University of Information Technology, Waknaghat, Solan, H.P.	Dr. Anil Kant	Session chair, Session chair TRACK – 4: High Performance Computing Intelligence
05-07 Aug 2021	Proceedings of the International Conference on Contemporary Computing (IC3-2021)	Jaypee Institute of Information Technology, Noida, UP	Dr. Tiratha Raj Singh	Presented a poster and published the article
11-13 Nov 2021	Indian Conference on Bioinformatics (InBix2021)	CSIR North East Institute of Science and Technology, Jorhat, Assam	Dr. Tiratha Raj Singh	Oral Presentation
20-22 Jan	ICABB-2022	Jaypee Institute of Information	Dr. Tiratha Raj Singh	Poster presentation

2022		Technology, Noida, UP		
07-08 Oct 2021	6th International Conference on signal processing, computing and control (ISPCC2K21)" the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Waknaghat, Himachal Pradesh, India.	Deptt.ECE, JUIT Waknaghat	Dr. Tiratha Raj Singh	Chaired a session
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Tiratha Raj Singh	Chaired a session
8-9 Oct 2021	3rd International Conference on Data Engineering and Applications, 2021 (IDEA-2021)	Deptt. Of CSE, OIST, Bhopal	Dr. Tiratha Raj Singh	Chaired a session
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Waknaghat	Deptt. BT & BI, JUIT Waknaghat	Dr. Udayabanu	Chaired a session
07-09 Oct 2021	6th International Conference on signal processing, computing and control (ISPCC2K21)" the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Waknaghat,	Deptt.ECE, JUIT Waknaghat	Dr. Udayabanu	Chaired a session

	Himachal Pradesh, India.			
7-9 Oct 2021	6th International conference on 'Signal Processing, Computing and Control (ISPCC-2k21), sponsored by IEEE Delhi section (Record No # 53510), on October 07 -09, 2021 at Jaypee University of Information Technology, Wagnaghat, Solan, H.P.	Sponsored by IEEE Delhi section, At Jaypee University of Information Technology, Wagnaghat, Solan, H.P.	Dr. Garlapati Vijay Kumar	Session chair
24-25 Nov 2021	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Wagnaghat	Deptt. BT & BI, JUIT Wagnaghat	Dr. Garlapati Vijay Kumar	Session Chair
26-28 Nov 2021	2021 Sixth International conference on Image Information Processing (ICIIP 2021)	Dept. Computer Science and Information technology, JUIT, Wagnaghat.	Dr. Garlapati Vijay Kumar	Session Chair
24-25 Nov 2021	International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment (RESE-2021)" Organized by Centre of Excellence in Sustainable Technologies for Rural Development [CESTRD], Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology (JUIT), Wagnaghat, Solan, H.P., INDIA.	Deptt. BT & BI, JUIT Wagnaghat, Solan	Dr. Rahul Shrivastava	Session Chair & Participant
7-9 Oct 2021	6th International conference on 'Signal Processing, Computing and Control (ISPCC-2k21), Organized by Department of Electronics and Communication Engineering, Jaypee	Deptt. BT & BI, JUIT Wagnaghat, Solan	Dr. Rahul Shrivastava	Session Chair

	University of Information Technology (JUIT), Wagnaghat, Solan, H.P., INDIA			
28Feb22	National Science Day Symposium	JUIT, Wagnaghat, Solan and HIMCOSTE, Govt. of H.P.	Dr. Rahul Shrivastava	Participant
10-11 Jan 2022	Adverse drug reactions: Issues and challenges during Covid-19	School of Health Sciences and Technology, UPES, Dehradun	Dr. Rahul Shrivastava	Participant

- **Conferences Organised:**

Dates	Subject (Topic)	Venue	Participation*	Remarks**
24-25 Nov, 2022	Virtual International Conference on "Technological Intervention in Renewable Energy for Sustainable Environment" Organized by Centre of Excellence in Sustainable Technologies for Rural Development (CESTRD) and Deptt. BT & BI, JUIT Wagnaghat	Deptt. BT & BI, JUIT Wagnaghat	42	Coordinator: Prof. Sudhir Kumar, Dr. Ashok Nadda Secretary: Dr. Abhishek Chaudhary
28 Feb, 2022	National Science Day Symposium (NSDS-22)	Jaypee University of Information Technology, Wagnaghat, Solan, H.P.	278	Convener: Dr. Tiratharaj Singh

- **Seminars**

- **Seminars Organized**

Dates	Subject	Venue	Participation (Nos.)	Remarks
26 Apr 2022	Speaker: Prof. Sudhir Kumar, Interactive session	IPR Cell, JUIT	64	Coordinator: Prof. Sudhir

	was conducted by on the theme "Igniting Innovation" on World IPR Day			Kumar
12 Mar 2022	Speaker: Dr Poonam Sharma & Dr Hemant Sood A webinar on Scopes of BT and BI to 12th class school students of Paradise Public School in Sundernager, Mandi	Department BT&BI, JUIT Waknaghat	50	Coordinator: Dr. Poonam Sharma & Dr. Hemant Sood
26 Apr 2021	Speaker: Prof. Sudhir Kumar Webinar on "IP awareness and theme of the year – Critical role of small and medium sized enterprises".	IPR Cell, JUIT	95	Coordinator: Prof. Sudhir Kumar
30 Oct 2021	Speaker: Mr. Shashi Dhar, Sr. Scientific Officer, HP Patent Information Centre, Shimla Webinar on Role of HP Patent Information Centre in filing the Patents".	IPR Cell, JUIT	80	Coordinator: Prof. Sudhir Kumar
16 Dec 2021	Speaker: Mr. Girish Minocha, CEO and MD of Minchys Food Products Shoghi Invited talk For MSc Biotechnology Students	Online, Department BT&BI, JUIT Waknaghat	60	Coordinator: Dr. Anil Kant
05 Mar 2022	Speaker: Prof Tek Chand Bhalla, HPU, Shimla Invited talk For MSc Biotechnology Students	Online, Department BT&BI, JUIT Waknaghat	60	Coordinator: Dr. Anil Kant
15 Sept 2021	Speaker: Dr. Ira Vashisth CRISPR/Cas Systems- A powerful tool for crop improvement	Online, Department BT&BI, JUIT Waknaghat	85	Organizer: Dr. Tiratha Raj Singh
11 Sept 2021	Speaker: Dr. Ankush Bansal Centre for Neuroscience Research, Children's National Hospital, Washington DC, USA AI platform to catalog unconventional stress proteins for deep exploration of space	Online, Department BT&BI, JUIT Waknaghat	122	Organizer: Dr. Tiratha Raj Singh
09 Oct 2021	Speaker: Dr. Gurnoor Singh, Center for Molecular	Online, Department	106	Organizer: Dr. Tiratha Raj

	and Biomolecular Informatics, Radboud UMC, Nijmegen, Netherlands Research Data Management and FAIR Principles for Healthcare Data” on Research and Technological Advancements in Bioinformatics	BT&BI, JUIT Waknaghat		Singh
20 Nov 2021	Speaker: Dr. Rajinder Gupta, Emmy Noether Group for Computational Microbiome Research, Technical University of Munich, Germany FuSe: A tool for functional analysis of RNA-Seq data	Online, Department BT&BI, JUIT Waknaghat	87	Organizer: Dr. Tiratha Raj Singh
18 Dec 2021	Speaker: Mr. Satyam Kapoor, Cloud Infrastructure Engineer, Sitecore, Belgium Containersation & Dev Ops Practices for Bioinformaticians	Online, Department BT&BI, JUIT Waknaghat	56	Organizer: Dr. Tiratha Raj Singh
28 Jan 2022	Speaker: Mr. Umang Maheshwari, Higher Studies in abroad- Europe as A Destination	Online, Department BT&BI, JUIT Waknaghat	77	Organizer: Dr. Saurabh Bansal
23 Apr 2022	Speaker: Prof. N.S. Hari Narayana Moorthy, Dean, Faculty of Pharmacy, Indira Gandhi National Tribal University, Amarkantak (MP), India Invited talk For MSc Biotechnology Students	Online, Department BT&BI, JUIT Waknaghat	11	Organizer: Dr. Udayabanu

• **Seminars Attended**

Date	Subject	Venue	Faculty Name	Remarks
26-Apr-2022	Interactive session was conducted by on the theme “ Igniting Innovation” on World IPR Day	JUIT	Prof. Sudhir Kumar	Coordinator
26-Apr-2021	Webinar on “IP awareness and theme of the year – Critical role of small and medium sized	JUIT	Prof. Sudhir Kumar	Coordinator

	enterprises”.			
30-Oct-2021	Webinar on Role of HP Patent Information Centre in filing the Patents”.	JUIT	Prof. Sudhir Kumar	Coordinator
30-Oct-2021	Role of HP Patent Information Centre in filing the Patents	Online	Dr. Gopal Singh Bisht	Attendee
09-Oct-2021	Research data management and principles for Healthcare data	Online	Dr. Saurabh Bansal	Attendee
20-Nov-2021	FuSe: A Tool for Functional Analysis of RNA-Seq Data	Online	Dr. Saurabh Bansal	Attendee
25-Aug-2022	Webinar Copyright protection organized by National Productivity Council (NPC) ,Ministry of Commerce and Industry, Government of India, in collaboration with Innovation-Technology Transfer Office, by National Biopharma Mission, BIRAC	Online	Dr. Hemant Sood	Attendee
13 & 14-Dec -2021	WoLT 2021 - International Webinar on Women Leading Technology Organised by IEEE GUJRAT SESSION	Online	Dr. Hemant. Sood	Attendee
14 Sept 2021	Attracting grants and funds for research	Online	Dr. Raj Kumar	Attended
9-Oct-2021	Research Data Management and FAIR Principles for Healthcare Data	Online	Dr. Raj Kumar	Attended
30-Oct-2021	Role of HP Patent Information Centre in filing the Patents	Online	Dr. Jitendraa Vashistt	Attendee
9-Oct-2021	International Webinar Series (IWS) on Research and Technological Advancements in Bioinformatics Centre of Excellence in Health Care Technologies and Informatics (CEHTI), Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology (JUIT), Research Data Management and FAIR Principles for Healthcare Data	Online	Dr Anil Kant	Attendee
20-Nov-21	International Webinar Series (IWS) on Research and Technological Advancements in Bioinformatics	Online		

	Centre of Excellence in Health Care Technologies and Informatics (CEHTI), Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology (JUIT), FuSe: A Tool for Functional Analysis of RNA-Seq Data			
21-Sep-21	Webinar on “Trends and Prospects of Plant Biotechnology” SPEAKER: Dr. Hemant Sood	Online	Dr. Hemant Sood	Coordinator and Attendee
15-Sep-21	CRISPR/Cas Systems- A powerful tool for crop improvement	Online	Dr. Tiratha Raj Singh	Organizer
11-Sep-21	AI platform to catalog unconventional stress proteins for deep exploration of space	Online	Dr. Tiratha Raj Singh	Organizer
9-Oct-21	Research Data Management and FAIR Principles for Healthcare Data” on Research and Technological Advancements in Bioinformatics	Online	Dr. Tiratha Raj Singh	Organizer
20-Nov-21	FuSe: A tool for functional analysis of RNA-Seq data	Online	Dr. Tiratha Raj Singh	Organizer
18-Dec-21	Containersation & Dev Ops Practices for Bioinformaticians	Online	Dr. Tiratha Raj Singh	Organizer
28-Feb-22	National Science Day Symposium (NSDS-22)	Jaypee University of Information Technology, Wagnaghat, Solan, H.P.	Dr. Tiratha Raj Singh	Convener
22-Dec-21	National Mathematics Day (NMD-2021)	Jaypee University of Information Technology, Wagnaghat, Solan, H.P.	Dr. Tiratha Raj Singh	Coordinator
20-Nov-2021	FuSe: A Tool for Functional Analysis of RNA-Seq Data	Online	Dr. Udayabanu	Attendee
09-Oct-2021	Research data management and Fair Principles for Healthcare data	Online	Dr. Udayabanu	Attendee
14-Sep-2021	Attracting grants and funds for research, Wiley	Online	Dr. Rahul Shrivastava	Attendee
18-Dec-2021	Containersation & Dev Ops Practices for Bioinformatician,	Online	Dr. Rahul Shrivastava	Attendee



	CEHTI, Department of Biotechnology and Bioinformatics, JUIT			
9-Oct-2021	Research Data Management and FAIR Principles for Healthcare Data, CEHTI, Department of Biotechnology and Bioinformatics, JUIT	Online	Dr. Rahul Shrivastava	Attendee
20-Nov-2021	FuSe: A Tool for Functional Analysis of RNA-Seq Data, CEHTI, Department of Biotechnology and Bioinformatics, JUIT	Online	Dr. Rahul Shrivastava	Attendee

• **Workshops**

• **Workshops Organized**

Dates	Subject	Venue	Participation (Nos.)	Remarks
9-Jun-2022	One-day workshop entitled "Environment and Sustainability" organized by Dept. of Biotechnology, JIIT, in collaboration with Dept. of Biotechnology & Bioinformatics, JUIT	Deptt. BT & BI, JUIT Waknaghat & Dept. of BT, JIIT Noida	45	Coordinator: Prof. Sudhir Kumar & Dr. Garlapati Vijay Kumar
27-May-2022	Biogas production using one-stage reactor in a National Conference on Current Scientific Innovations & Research in Plant Biology - Plenary Lecture	Eternal University, Baru Sahib, Sirmour	150	Plenary lecture: Prof. Sudhir Kumar
28-Feb-2022	Hands on experience on different biotechnological techniques for B.Sc. Biotechnology students	Khalsa College Patiala	42	Coordinator: Prof. Sudhir Kumar
18-Nov-2021	A virtual Workshop of Plant Tissue Culture Techniques and their applications to B.Sc. final yr students of Vallabh Govt College, Mandi	Department BT & BI, JUIT Waknaghat, Solan	250	Coordinator: Dr. Hemant Sood & Dr. Poonam Sharma
04-Mar-2022	Organized, Educational tour of MSc	Department BT & BI, JUIT Waknaghat,	30	Coordinator: Dr. Anil Kant

	Biotechnology second year to CPRI Shimla, Advanced studies	Solan		and Dr. Saurabh Bansal
17-23-June-2022	DST and DBT Sponsored Third National Workshop on Statistical Techniques on Biological and Medical Sciences (STBMS)	Department BT& BI, JUIT Waknaghat, Solan	30	Coordinator: Dr. Tiratha Raj Singh
5-May-2022	Organized, Academic tour of B.Tech. Bioinformatics and MSc Microbiology students to IMTECH, Chandigarh	Department BT& BI, JUIT Waknaghat, Solan	40	Coordinator: Dr. Tiratha Raj Singh
01-June to 13-July-2022	Summer Training Workshop	Department BT& BI, JUIT Waknaghat, Solan	15	Coordinator: Dr. Rahul Shrivastava

• **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
09-06-2022	One-day workshop entitled "Environment and Sustainability" organized by Dept. of Biotechnology, JIIT, in collaboration with Dept. of Biotechnology & Bioinformatics, JUIT	Deptt. BT & BI, JUIT Waknaghat	Prof. Sudhir Kumar & Dr. Garlapati Vijay Kumar	Coordinator
28-2-2022	Hands on experience on different biotechnological techniques	Khalsa College Patiala	Prof. Sudhir Kumar	Coordinator
08-03-2021 to 13-03-2021	One week workshop on "Women Innovations and IPR" in Jaypee University of Information Technology in collaboration with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE)	JUIT Waknaghat	Prof. Sudhir Kumar	Coordinator
21-02-2022 to 23-02-2022	3day IPR Awareness workshop	PUSA KRISHI, Pusa Campus, New Delhi	Dr. Hemant Sood	Attendee
09-06-2022	One-day workshop entitled "Environment and Sustainability"	JUIT Waknaghat	Dr. Abhishek, Dr. Poonam Sharma, Dr. Raj	Attendee

			Kumar, Dr. Ashok K Nadda, Dr. Jata Shankar, Dr. Jitendraa Vashistt, Dr. Anil Kant, Dr. Saurabh Bansal, Dr. Shikha Mittal, Dr. Tiratha Raj Singh,	
09-05-2022	One-day workshop entitled "Protein separation and Visualization techniques"	Scholar's Global School, Bhadurgarh, Haryana.	Dr. Jitendraa Vashistt	Coordinator
22-06-2022 to 24-06- 2022	Factory Automation by Mitsubishi Official	JUIT Waknaghat	Dr. Shikha Mittal	Attendee
17-23, June, 2022	DST and DBT Sponsored Third National Workshop on Statistical Techniques on Biological and Medical Sciences (STBMS)	JUIT Waknaghat	Dr. Tiratha Raj Singh	Coordinator
6-06-2022 to 11-06.2022	Data Analytics and its Research Perspectives	JUIT Waknaghat	Dr. Udayabanu	Attendee
6th –11th June 2022 One Week	Data Analytics and its Research Perspectives	Department of CSE/ IT, JUIT Waknaghat	Dr. Rahul Shrivastava	Attendee
14 Feb - 24 Feb, 2022	Data Science and Machine Learning in Biology	Dollar Education Group	Dr. Rahul Shrivastava	Attendee
3 July - 4 Sep 2021 (Every Saturday)	Industrial Revolution 4.0	Department of ECE, JUIT Waknaghat	Dr. Rahul Shrivastava	Attendee

- **Faculty Development Programs**

- **Faculty Development Programs Organized: Nil**

- **Faculty Development Programs Attended**

<b>Dates</b>	<b>Subject</b>	<b>Venue</b>	<b>Faculty Name</b>	<b>Remarks</b>
11-Jan-2022	As Resource person in a Faculty Development Program of UGC – Human Resource Development Centre on topic- A way forward towards Sustainable Development	Guru Nanak Dev University, Amritsar	Prof. Sudhir Kumar	Resource Person
09-May-2022 to 13-May-2022 One Week	NEP 2020 Implementation in Higher Education Institutes	Curriculum Development Centre Department , NITTTR AT JUIT	Dr. Gopal Singh Bisht, Dr. Hemant Sood, Dr. Saurabh Bansal, Dr. Raj Kumar, Dr. Jata Shankar, Dr. Jitendraa Vashistt, Dr. Udayabanu, Dr. Rahul Shrivastava	Attendee
26-July-2021 to 18-Sept-2021	Faculty development programme on Entrepreneurship and IP strategy	NPTEL, IIT Kharagpur, Funded by the Ministry of HRD, Govt of India	Dr. Hemant Sood	Attendee
02-Aug-2021 to 06-Aug-2021 One Week	Fermentation Technology and Biochemical Engineering	AICTE Training and Learning (ATAL) Academy online Elementary at Jeppiaar Engineering College, Chennai	Dr. Saurabh Bansal	Attendee
10-Jan-2022 to 11-Jan-2022	Online Teaching and Evaluation	NITTTR CHENNAI	Dr. Jata Shankar, Dr. Jitendraa Vashistt, Dr. Tiratha Raj Singh	Attendee
23-May-	"Data Analysis Using R	Online by Aricap	Dr. Udayabanu	Attendee

2022 to 27-May-2022	and Python"	Advisory Services		
02-Aug-2021 to 06-Aug-2021	ATAL FDP on "Fermentation Technology"	AICTE and Jeppiar Engineering College, Chennai	Dr.Garlapati Vijay Kumar	Attendee

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation (Since publication)
Prof. Sudhir Kumar	Energy possibilities and future strategies for municipal solid waste in Himachal Pradesh	Materials Today: Proceedings (Journal).	Materials Today: Proceedings (Journal) - Scopus.	0
Dr. Gopal Singh Bisht	A Mini-Review on Potential of Neuropeptides as Future Therapeutics	International Journal of Peptide Research and Therapeutics	28 (1): 1-13, SCI Scopus	0
Dr. Saurabh Bansal	Multivariate analysis of adaptive response to ferulic acid and p-coumaric acid after physiological stresses in <i>Cronobacter sakazakii</i>	Journal of Applied Microbiology	2021, 131 (6): 3069-3080, IF: 3.772, Scopus, SCI	2
Dr. Saurabh Bansal	Arginine depriving enzymes: applications as emerging therapeutics in cancer treatment	Cancer Chemotherapy and Pharmacology	2021, 88 (4): 565-594, IF: 3.333, Scopus, SCI	4
Dr. Saurabh Bansal	Statistical modeling and optimization of microbial phytase production towards utilization as a feed supplement	Biomass Conversion and Biorefinery	2021, IF: 4.987, Scopus, SCIE	2
Dr. Hemant Sood	Computational analysis for regulation of Podophyllotoxin biosynthesis pathways in <i>Podophyllum hexandrum</i> with potential substitute	Defence Life Science Journal.	2022,7(2) 97-102,IF0.3,Scopus	0

	species			
Dr. Hemant Sood	Comparative coexpression networks pinpoint acyltransferases decorating structures of major iridoid glycosides in a medicinal herb, <i>Picorrhiza kurroa</i>	Plant Gene	2022.31:10366,IF :2.57.SCI	0
Dr. Hemant Sood	Green synthesis of silver nanoparticles using <i>Rhodiola imbricate</i> and <i>Withania somnifera</i> root extract and their potential catalytic, antioxidant, cytotoxic and growth-promoting activities.	Bioprocess and Biosystems Engineering	2022,.45(2):365-380,IF 3.2,SCI	2
Dr. Hemant Sood	Agro-morphological characterization and nutritional profiling of traditional Himalayan crop landraces for their promotion towards mainstream agriculture	Frontiers in Plant Science	2022, 31: doi: 10.3389/fpls.2022.898220,IF: 5.7,SCI	1
Dr. Abhishek Chaudhary	Nanocatalysts as potential candidates in transforming CO <sub>2</sub> into valuable fuels and chemicals: A review	Environmental Nanotechnology, Monitoring & Management	2022,18,100671, SCI	0
Dr. Abhishek Chaudhary	Sustainable synthesis of silver nanoparticles using various biological sources and waste materials: a review	Emergent materials	2021, <a href="https://doi.org/10.1007/s42247-021-00292-5">https://doi.org/10.1007/s42247-021-00292-5</a> , SCI	5
Dr. Abhishek Chaudhary	Synthesis of Quercetin Functionalized Silver Nanoparticles and Their Application for the Colorimetric Detection of L Cysteine in Biologically Complex Fluids	Chemistry Select	2022, e202104147, SCI, 10.1002/slct.202104147	0
Dr. Raj	Identification of ACK1	Journal of	<a href="https://doi.org/10.">https://doi.org/10.</a>	7

Kumar	inhibitors as anticancer agents by using computer-aided drug designing	Molecular Structure	1016/j.molstruc.2021.130200	
Dr. Raj Kumar	Scaffold-free 3D culturing enhance pluripotency, immunomodulatory factors, and differentiation potential of Wharton's jelly-mesenchymal stem cells	European Journal of Cell Biology	DOI: 10.1016/j.ejcb.2022.151245	0
Dr. Raj Kumar	Enzyme mediated transformation of CO <sub>2</sub> into calcium carbonate using purified microbial carbonic anhydrase	Environmental Research	<a href="https://doi.org/10.1016/j.envres.2022.113538">https://doi.org/10.1016/j.envres.2022.113538</a>	0
Dr. Jata Shankar	Food Habit Associated Mycobiota Composition and Their Impact on Human Health	Frontiers in Nutrition	2021; 8: 773577 <a href="http://doi.org/10.3389/fnut.2021.773577">http://doi.org/10.3389/fnut.2021.773577</a> IF-6.5 SCIE	1
Dr. Jata Shankar	Insight into the metabolic changes during germination of <i>Aspergillus niger</i> conidia using nLC-qTOF	Biologia	2022 <a href="https://doi.org/10.1007/s11756-022-01115-6">https://doi.org/10.1007/s11756-022-01115-6</a> IF-1.3 SCIE	0
Dr. Anil Kant	Functional Foods as formulation ingredients in beverages: Technological Advancements and Constraints.	Bioengineered	2021, 12 (2), 11055-11075	0
Dr. Anil Kant	Onion genotypes Red Cereole, followed by Katarina Red 3 and Katarina Red 7 are superior with respect to post harvest quality parameters	Australian Journal of Crop Science	2022, 16(02), 162-170, doi: 10.21475/ajcs.22.16.02.3169	0
Dr. Tiratha Raj Singh	Novel inhibitors design through structural investigations and simulation studies for human PKMTs (SMYD2) involved in	Molecular Simulation	2021, 47:14, 1149-1158, IF: 2.178 DOI: 10.1080/08927022.2021.1957882	1

	cancer			
Dr. Tiratha Raj Singh	Structural and functional analysis of disease-associated mutations in GOT1 gene: An in silico study	Computers in Biology and Medicine	2021, 136, 104695, IF: 6.698, <a href="https://doi.org/10.1016/j.compbiomed.2021.104695">https://doi.org/10.1016/j.compbiomed.2021.104695</a>	1
Dr. Ashok Kumar Nadda	A hybrid chemobiocatalytic system of carbonic anhydrase submerged in CO <sub>2</sub> -phillic sterically hindered amines for enhanced CO <sub>2</sub> capture and conversion into carbonates	International Journal of Greenhouse Gas Control	2021, 111, 103465, IF: 4.4	4
Dr. Ashok Kumar Nadda	Integrated catalytic insights into methanol production: Sustainable framework for CO <sub>2</sub> conversion	Journal of Environmental Management	2021, 289, 112468m IF: 8.9	11
Dr. Ashok Kumar Nadda	Enzyme mediated transformation of CO <sub>2</sub> into calcium carbonate using purified microbial carbonic anhydrase.	Environmental Research	2022, 212, 113538, IF: 8.4	0
Dr. Ashok Kumar Nadda	Mitigation of hazards and risks of emerging pollutants through innovative treatment techniques of post methanated distillery effluent-A review.	Chemosphere	2022, 300, 134586, IF: 8.9	0
Dr. Ashok Kumar Nadda	Surface engineering of Au nanostructures for plasmon-enhanced electrochemical reduction of N <sub>2</sub> and CO <sub>2</sub> into urea in the visible-NIR region	Applied Energy	2022, 318(6):119244, IF: 11.4	0
Dr. Ashok Kumar Nadda	Effects of waste-based pyrolysis as heating source: Meta-analyze of char yield and machine learning analysis	Fuel	2022, 318:123578, IF: 8.0	2
Dr. Ashok	Emerging chemo-	Journal of Industrial	2022, 109, 1-20,	3



Kumar Nadda	biocatalytic routes for valorization of major greenhouse gases (GHG) into industrial products: A comprehensive review	and Engineering Chemistry	IF: 6.664	
Dr. Ashok Kumar Nadda	Mechano-chemical and biological energetics of immobilized enzymes onto functionalized polymers and their applications	Bioengineered	2022, 13(4):10518-10539, IF: 6.8	1
Dr. Ashok Kumar Nadda	Engineered microbes as effective tools for the remediation of polyaromatic aromatic hydrocarbons and heavy metals	Chemosphere	2022, 306:135538, IF: 8.9	0
Dr. Ashok Kumar Nadda	Role of microbes in bioaccumulation of heavy metals in municipal solid waste: Impacts on plant and human being	Environmental pollution	2022, 305(4):119248, IF: 9.9	0
Dr.Garlapati Vijay Kumar	Novel Insights into Anammox-based Processes from the Application Perspective: A Critical Review.	Chemical Engineering Journal	2022,444:13653, IF:16.744	0
Dr.Garlapati Vijay Kumar	Invasive weed optimization coupled biomass and product dynamics of tuning soybean husk towards lipolytic enzyme	Bioresource Technology	2022, 344(B):126254., IF: 11.889	3
Dr.Garlapati Vijay Kumar	Paper-based Microfluidic Devices for Food Adulterants: Cost-Effective Technological Monitoring Systems	Food Chemistry	2022,390 (1): 133173, IF:9.231	0
Dr.Garlapati Vijay Kumar	A sustainable approach of turning potato waste towards Bioethanol production using Indigenous microbes of Himachal Pradesh, India.	Chemosphere	2022, 299: 134429, IF:8.943	1

Dr.Garlapati Vijay Kumar	Enzymatic biodiesel synthesis from <i>Trichosporon shinodaeyeast</i> through circular economy: A greener approach	Fuel	2022, 325 (1):124595, IF:.8.035	0
Dr.Garlapati Vijay Kumar	Bioelectrochemical Systems-based Metal Recovery: Resource, Conservation and Recycling of Metallic Industrial Effluents	Environmental Research	2022, 204(D): 112346, IF:8.431	2
Dr.Garlapati Vijay Kumar	Comprehensive Review on Biotechnological production of hyaluronic acid: status, innovation, market and applications.	Bioengineered	2022, 13(4): 9645-9661, IF:6.832	1
Dr.Garlapati Vijay Kumar	Biodiesel production from <i>Brassica juncea</i> using oleaginous yeast.	Applied Biochemistry and Biotechnology	2022, Online First, DOI:10.1007/s12010-022-03974-w, IF:3.09	0
Dr.Garlapati Vijay Kumar	Bioconversion of waste glycerol for enhanced lipid accumulation in <i>Trichosporon shinodae</i> .	Biomass Conversion and Biorefinery	2021, Online First, DOI: 10.1007/s13399-021-01799-x, IF: 4.050	0
Dr.Garlapati Vijay Kumar	Biodiesel production from Lignocellulosics biomass using oleaginous microbes: Prospects for integrated biofuel production.	Frontiers in Microbiology	2021, 12:2080, IF: 6.063	15
Dr.Garlapati Vijay Kumar	From electricity to products - Recent updates on microbial electrosynthesis (MES).	Topics in Catalysis	2021, Online First, DOI:10.1007/s11244-021-01503-3, IF: 2.781	6
Dr.Garlapati Vijay Kumar	Functional Foods as formulation ingredients in beverages: Technological Advancements and	Bioengineered	2021, 12(2): 11055-11075, IF:6.832	3

	Constraints.			
Dr. Rahul Shrivastava	Identification and in silico characterization of transcription termination/antitermination protein NusA of <i>Mycobacterium fortuitum</i>	Biologia	2021,76:3855-3863, IF 1.350, SCOPUS, SCIE	0
Dr. Rahul Shrivastava	Decoding <i>Acinetobacter baumannii</i> biofilm dynamics and associated protein markers: proteomic and bioinformatics approach	Archives of Microbiology	2022,204(4):200, IF 2.552, SCOPUS, SCI, SCIE	0
Dr. Rahul Shrivastava	Response surface modeling integrated microtiter plate assay for <i>Mycobacterium fortuitum</i> biofilm quantification	Biofouling	2021,37(8):830-843, IF 3.209, SCOPUS, SCIE	2
Dr. Rahul Shrivastava	<i>Mycobacterium fortuitum fabG4</i> knockdown studies: implication as pellicle and biofilm specific drug target	Journal of Basic Microbiology	2022,IF 2.281, SCOPUS, SCI, SCIE	0
Dr. Rahul Shrivastava	Knockdown of the type-II fatty acid synthase gene <i>had C</i> in <i>Mycobacterium fortuitum</i> does not affect its growth, biofilm formation, and survival under stress	International Journal of Mycobacteriology	2022,11(2):159-166, SCOPUS, SCIE	0

- **Patents**

S. No.	Patent No. and Date of Grant	Application no.	Title	Department and Inventors
1	379507 20 Oct 2021	2248/DEL/2011	A Novel Anticalcifying Protein from <i>Tribulus Terrestris</i>	Deptt. Biotechnology and Bioinformatics  Anshu Aggarwal Chanderdeep Tandon
2	2021104416 12 May 2022		Device for Measuring Severity Estimation in	CEHTI, Deptt. of Biotechnology and

			Muscular Atrophy and Inflammation of Muscles	Bioinformatics, Sunil Kr. Prajapati, Tiratha Raj Singh, Prashant Nayak, Prasanna Shama Khandige, Saket Singh Chandel, Chandrasekhar D. Upasani
3		202011002065 23 July, 2021	Metal leaching from e-waste using cyanogenic waste	Deptt. of Biotechnology and Bioinformatics,  Dr. Sudhir Kumar, Anil Kumar

- **Books/Book Chapters Published**

- **Books**

Name of Faculty	Name of Book	Reference	Publisher	Remark
Poonam Sharma	Analysis of surfactant micelles and their interaction with antimicrobial drug itraconazole for potential pharmaceutical application	2022, 9786204745213	Lambert	

- **Book Chapters**

Name of Faculty	Book Chapter Title	Name of Book	Reference	Remark
Prof. Sudhir Kumar	Co-Digestion of Lignocellulosic Wastes with Food Waste for Sustainable Biogas Production.	Microbial Biotechnology for Renewable and Sustainable Energy	2022, 77-97. Eds. Jitendra Kumar Saini and Rajesh K Sani. ISBN: 978-981-16-3852-7	Springer
Dr Hemant Sood	Plant-microbe interaction and recent trends in biotechnology for secondary metabolites production in medicinal plants	Plant-Microbial Interactions and Smart Agricultural Biotechnology	2021, 199-216, Eds. Tyagi-Kumar-Saharan-Nadda ISBN: 9781032100418	CRC press Taylor and Francis USA
Dr. Saurabh Bansal	Protein Engineering: Methods and Applications	Advances in Protein Molecular and Structural Biology Methods	2022, 641-668, Eds. Timir Tripathi, Vikas Kumar Dubey ISBN: 978-	Academic Press (Elsevier), USA

			0-323-90264-9	
Dr Hemant Sood	In Vitro Production of Medicinal Compounds from Endangered and Commercially Important Medicinal Plants	Agricultural Biotechnology: Latest Research and Trends	2022, Pp53-74, Eds. Dinesh Kumar Srivastava, Ajay Kumar Thakur, Pankaj Kumar, ISBN : 978-981-16-2339-4	Springer Nature India
Dr. Raj Kumar	Recent Advancement and Challenges in Deep Learning, Big Data in Bioinformatics	Blockchain and Deep Learning	ISBN : 978-3-030-95418-5	Springer Cham.
Dr. Tiratha Raj Singh	Systems biology and big data analytics	Bioinformatics, Methods and Application	2022, 425-442. Eds. Dr. Dev Bukhsh Singh and Dr. Rajesh Kumar Pathak. ISBN: 978-0-323-89775-4	Academic Press (Elsevier), USA
Dr. Tiratha Raj Singh	Topological parameters, patterns, and motifs in biological networks	Bioinformatics, Methods and Application	2022, 425-442. Eds. Dr. Dev Bukhsh Singh and Dr. Rajesh Kumar Pathak. ISBN: 978-0-323-89775-4	Academic Press (Elsevier), USA
Dr. Tiratha Raj Singh	Machine learning in expert systems for disease diagnostics in human healthcare	Intelligent Data-Centric Systems, Machine Learning, Big Data, and IoT for Medical Informatics	2021, 179-200, Eds. Pardeep Kumar, Yugal Kumar, Mohamed A. Tawhid, ISBN: 978-0-12-821777-1	Academic Press (Elsevier), USA
Dr. Ashok Kumar Nadda	Advances in Carbon Capture and Utilization	Advances in Carbon Capture and Utilization	2021, 3-7, ISBN : 978-981-16-0638-0	Springer
Dr. Ashok Kumar Nadda	Progresses in Bioenergy Generation from CO <sub>2</sub> : Mitigating the Climate Change	Advances in Carbon Capture and Utilization	2021, 297-312, ISBN : 978-981-16-0638-0	Springer
Dr. Ashok Kumar Nadda	Nanobiocatalysis: an introduction	Nanomaterials for Biocatalysis	2022, 3-15, ISBN: 9780128244364	Elsevier
Dr. Ashok Kumar Nadda	Methane Conversions	C1 Chemistry	2022, ISBN : 9781003279280	Taylor and Francis
Dr. Garlapati Vijay Kumar	Bioelectrochemical methods in Biomolecular Analysis	Nanobioanalytical Approaches to Medical Diagnostics	2022, pp. 65-104, Eds. P Maurya & P Chandra	Elsevier

			ISBN: 9780323851473	
Dr.Garlapati Vijay Kumar	Technologies for oil extraction from oilseeds and oleaginous microbes.	Three Phase Partitioning: Applications in Separation and Purification of Biological Molecules and Natural Products.	2021, pp.243-266, Eds. MN Gupta and Ipsita Roy, Editors), ISBN: 9780128244180	Elsevier
Dr Rahul Shrivastava	Next-Generation Omics Technologies to Explore Microbial Diversity	Microbes in Land Use Change Management	2021, pp.541-563, Eds. Jay Shankar Singh, ShashankTiwari, Chhatarpal Singh, Anil Kumar Singh ISBN: 978-0-12- 824448-7	Elsevier

- **Conference Publications**

Name of Faculty	Title of Article Presented	Name of Conference	Reference	Dates
Dr. Raj Kumar	Classification of Heart Disease from MRI Images Using Convolutional Neural Network	2021 6 <sup>th</sup> International Conference on Signal Processing, Computing and Control (ISPCCC)	DOI: 10.1109/ISP CC53510.20 21.9609408	07-09 Oct 2021
Dr. Tiratha Raj Singh	Early Diagnosis of Alzheimer's Disease using Machine Learning Based Methods	Proceedings of the International Conference on Contemporary Computing (IC3-2021)	<a href="https://doi.org/10.1145/3474124.3474134">https://doi.org/10.1145/3474124.3474134</a>	05-07 Aug 2021

- **Technology Transfer**

Name of Faculty	Technology Transfer	Date	Venue
Prof. Sudhir Kumar	Installation of one Biogas reactor of 3000 liters (Substrate tank) & 2000 liters (Gas Holder Tank) capacity	18-02-2022	Chitkara University, Baddi
Prof. Sudhir Kumar	Maintenance of three Biogas reactors of 2000 liter capacity each in 3 BRD Air Force Command Station Chandigarh	20-04-2022	3 BRD Air Force Command Station Chandigarh

- **Guest Speakers/Lectures**

- **Guest Speakers**

<b>Name</b>	<b>Affiliation</b>	<b>Title</b>	<b>Date</b>
Dr. Ankush Bansal	Centre for Neuroscience Research, Children's National Hospital, Washington DC, USA	AI platform to catalog unconventional stress proteins for deep exploration of space	11-Sep-21
Dr. Gurnoor Singh	Center for Molecular and Biomolecular Informatics, Radboud UMC, Nijmegen, Netherlands	Research Data Management and FAIR Principles for Healthcare Data” on Research and Technological Advancements in Bioinformatics	9-Oct-21
Mr. Shashi Dhar	Sr. Scientific Officer, HP Patent Information Centre, Shimla	Role of HP Patent Information Centre in filing the Patents	30-Oct-21
Dr. Rajinder Gupta	Emmy Noether Group for Computational Microbiome Research, Technical University of Munich, Germany	FuSe: A tool for functional analysis of RNA-Seq data	20-Nov-21
Prof. R. K. Sani	South Dakota School of Mines and Technology, USA	Rules of Life of sulfate-reducing biofilms grown on metal surfaces	24-Nov-21
Dr. Sunil Kumar	CSIR NEERI, Pune	Waste Management and Renewable Energy for Sustainable Environment	24-Nov-21
Dr. Rameshprabu Ramaraj	Assistant Dean at the School of Renewable Energy, Maejo University, Chiang Mai, Thailand	Biomethane as a transportation fuel	24-Nov-21
Mikhail Vainshtein	G.K. Skryabin Institute of Biochemistry and Physiology of Microorganisms Russian Academy of Sciences (IBPM RAS)	Oxidative additive for increasing microbial activities	24-Nov-21

Dr. Sunita Varjani	Scientific Officer at Gujarat Pollution Control Board, Gandhinagar, Gujarat,	Prospects on Integrated Municipal Solid Waste Management for Energy Generation	25-Nov-21
Dr. Yuwalee Unpaprom,	Assistant Professor at Program in Biotechnology, Faculty of Science, Maejo University, Chiang Mai, Thailand	Agricultural waste biomass as a renewable bioenergy resource for bioethanol production	25-Nov-21
Prof. Dr. Luciane Maria Colla	Professor at the University of Passo Fundo, Brazil	Effluent valuation, bioethanol and high added value products from microalgae	25-Nov-21
Sanjeev Kumar Prajapati	Assistant Professor, HRED, IIT Roorkee	Improved biogas from algal biomass through fungi mediated harvesting and pretreatment	25-Nov-21
Dr. Prashant Botham	USA	Energy harvesting for small scale electronic operation	25-Nov-21
Mr Grish Minocha	GM Minchys Industries	Invited talk For MSc Biotechnology Students	16-Dec-21
Mr. Satyam Kapoor	Cloud Infrastructure Engineer, Sitecore, Belgium	Containersation & Dev Ops Practices for Bioinformaticians	18-Dec-21
Umang Maheshwari	Master of Science in Molecular Bioengineering - --- Technische Universitat Dresden, Germany	Higher Studies in abroad-Europe as A Destination	28-Jan-22
Prof Tek Chand Bhalla	Professor, Dept. of Biotechnology, Himachal Pradesh University, Shimla	Invited talk For MSc Biotechnology Students	5-Mar-22
Prof. N.S. Hari Narayana Moorthy	Dean, Faculty of Pharmacy, Indira Gandhi National Tribal University, Amarkantak (MP), India	Invited talk For MSc Biotechnology Students	23-Apr-22



- **Lectures Delivered by Faculty**

<b>Name of Faculty</b>	<b>Designation of Faculty</b>	<b>Topic of Lecture</b>	<b>Date</b>	<b>Venue</b>
Prof. Sudhir Kumar	Prof. & Head of Department	Career counseling to the B.Sc. students of Saunjauli College (Shimla)	21-June-2022	Online
Prof. Sudhir Kumar	Prof. & Head of Department	Talk on "Opportunities in Biotechnology and Bioinformatics" for 15 medical stream students of MDN Public School, Rohtak, Haryana	01-Apr-2022	Online
Prof. Sudhir Kumar	Prof. & Head of Department	Online Career Counselling session of B.Sc. students	09-Feb-2022	Online
Prof. Sudhir Kumar	Prof. & Head of Department	Talk on "Opportunities in Biotechnology and Bioinformatics" for students of Guru Gobind Singh School, Bokaro, Jharkhand	21-Jan-2022	Online
Prof. Sudhir Kumar	Prof. & Head of Department	Talk on Scope of Biotechnology, eligibility criteria for admissions in Biotechnology	15-Nov-2021	Govt. PG College, sector-1, Panchkula
Prof. Sudhir Kumar	Prof. & Head of Department	Sustainable management of biomass for energy generation in International Conference on Renewable Energy for Sustainable Environment organized by [CESTRD] Department of Biotechnology & Bioinformatics Jaypee University of Information Technology Waknaghat	24-25 Nov, 2021	JUIT, Waknaghat

Dr Hemant Sood	Associate Professor	Production of secondary metabolites	05-July-2021	College Of Horticulture And Forestry Dr. Y.S. Parmar University Of Horticulture And Forestry Neri, Distt. Hamirpur (HP) (Online)
Dr Hemant Sood	Associate Professor	Plant Tissue techniques and its applications	28-Feb-2022	Department of Biotechnology at Khalsa College, Patiala with Department of BT and BI, JUIT, Wagnaghat.
Dr Hemant Sood	Associate Professor	Trends and scope of Plant Biotechnology	21-Sept-2021	Departmental Webinar Series organized by Department of BT and BI, JUIT Wagnaghat
Dr Hemant Sood	Associate Professor	Production of Medicinal Compounds from Endangered and Commercially Important Medicinal Plants of Himalayas Through Cell and Tissue Culture Technology for Herbal Industry	24-Mar-2022	Plant Virtual Summit 2022 "Webinar on Plant Science and Agricultural Research" organized by Irish Scientific Group
Dr. Poonam Sharma	Associate Professor	Preformulation studies: An integral part of formulation design	04-Jan-2022	Online FDP on "Essential Materials Chemistry for Engineers" organized by NITTTR, Chandigarh.
Dr. Poonam Sharma	Associate Professor	Utilization of physicochemical studies in topical formulation	06-Jan-2022	Online FDP on "Essential Materials Chemistry for Engineers" organized by

				NITTTR, Chandigarh.
Dr Jata Shankar	Associate Professor	Application of in-silico tools in protein interaction studies”	15-Apr-2022	in “Next Generation Bioinformatics Approaches In Infection Biology” held at Jaypee Institute of Information Technology, Noida
Dr Anil Kant	Associate Professor	Importance of science, with respect to daily life and as career prospects	24-Feb-2002	GSSS, Barmana, National Science day awareness
Dr Anil Kant	Associate Professor	Importance of science, with respect to daily life and as career prospects	24-Feb-2002	GSSS, Panjgani National Science day Awareness
Dr. Tiratha Raj Singh	Associate Professor	Bioinformatics A new beginning to Applications Based Province with Case Studies on Human Diseases	25-Oct-2021	JUIT, Wagnaghat (Online)
Dr. Tiratha Raj Singh	Associate Professor	Bioinformatics Tools, Applications and opportunities	16-19-Oct-2021	HIT SUMMIT-2021, IIIT Delhi (online)
Dr. Udayabanu	Associate Professor	Career in Biotechnology & Bioinformatics	08-Mar-2022	Sri Sankara Sr Sec School, Adyar, Chennai, Tamil Nadu
Dr.Garlapati Vijay Kumar	Associate Professor	Research Activities towards UN Environmental SDG's	09-June-2022	Work shop on "Environment and Sustainability" at JUIT, Wagnaghat
Dr. Rahul Shrivastava	Associate Professor	Wearable Biosensors: Recent Innovation in Bioscience Technology	03-03-2022	National Seminar on “Emerging Trends & Innovations in Biosciences” at the School of Life and Allied

				Science, ITM University, Raipur (Chhattisgarh) India.
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- **Recognition & Awards**

- **By Faculty**

<b>Name of Faculty</b>	<b>Designation of Faculty</b>	<b>Award in full details</b>	<b>Date</b>	<b>Achievement</b>
Prof. Sudhir Kumar	Professor and Head	Ph.D. Thesis examiner	12 May 2022	Dept. of Biotechnology, Himachal Pradesh University, Shimla
Prof. Sudhir Kumar	Professor and Head	Appointed as BOS member for Biotechnology Program (B.Sc. Biotechnology)	25 April 2022	Khalsa College, Patiala
Prof. Sudhir Kumar	Professor and Head	Ph.D. Thesis and final defense examiner	10 March 2022	Dept. of Biotechnology, Himachal Pradesh University, Shimla
Prof. Sudhir Kumar	Professor and Head	M. Sc. Thesis examiner	21 November 2021	Dept. of Soil Sciences and Water Management, YS Parmar Univ. of Horticulture and Forestry, Nauni, Solan, HP
Prof. Sudhir Kumar	Professor and Head	Ph.D. Thesis and final defense examiner	09 October 2021	Akal College of Agriculture, Eternal University, Baru Sahib, Sirmour, HP
Dr. Garlapati Vijay Kumar	Associate Professor	Listed in "Top 2% World's Scientists 2021" by Stanford University, USA	17-Nov-2021	Featured in the List
Dr. Garlapati Vijay Kumar	Associate Professor	Listed in "AD Scientific index 2021: World Scientist and University	24-Nov-2021	Featured in the List

		Rankings 2021".		
Dr. Rahul Shrivastava	Associate Professor	External expert for the Moderation of the Question papers for Microbiology and Biotech Programs, BSc, MSc Microbiology and B.Tech Biotech.	14-Apr-2022	School of Health Sciences, University of Petroleum and Energy Studies, Dehradun
Dr. Rahul Shrivastava	Associate Professor	External expert for M.Tech and B.Tech Biotechnology Dissertation and Project evaluation	10-Aug-2021	G. B. Pant Institute of Engineering and Technology, Pauri-Garhwal (UK)
Dr. Rahul Shrivastava	Associate Professor	External Expert Member of Board of Studies (BoS)	25-Nov-2021	G. B. Pant Institute of Engineering and Technology, Pauri-Garhwal (UK)
Dr. Rahul Shrivastava	Associate Professor	Thesis Evaluation	23-July-2021	Sri Sathya Sai Institute of Higher Learning, Anantapur, Andhra Pradesh, India

- **Related to Journals**

Name of Faculty	Journal Name	Designation (Role) in Journal	Publisher	Whether Scopus/SCI/SCIE	Impact Factor
Dr. Raj Kumar	Nutrients	Reviewer	MDPI	Yes	5.7
	International Journal of Environmental Research and Public Health	Reviewer	MDPI	Yes	3.3
	Life	Reviewer	MDPI	Yes	3.8
	Scientific Reports	Reviewer	Nature Publishing Group	Yes	4.3
	Molecules	Reviewer	MDPI	Yes	4.4
	Computers in Biology and Medicine	Reviewer	Elsevier	Yes	4.5
Dr. Tiratha Raj Singh	Computers in Biology and Medicine	Reviewer	Elsevier	Yes	4.5

	Scientific Reports	Reviewer	Nature Publishing Group	Yes	4.3
	Briefings in Bioinformatics	Reviewer	Elsevier	Yes	11.62
	JBSD	Reviewer	Taylor and Francis	Yes	5.23
Dr.Garlapati Vijay Kumar	Frontiers in Energy Research	Associate Editor	Frontiers	Yes	3.858
	Frontiers in Bioengineering and Biotechnology	Review Editor	Frontiers	Yes	6.064
	Frontiers in Catalysis	Review Editor	Frontiers	Scopus	Awaiting
	BMC Biotechnology	Editorial Board Member	Biomed Central	Yes	3.329
	Journal of Chemistry	Editorial Board Member	Hindwai	Yes	3.241
	Biotechnology Advances	Reviewer	Elsevier	Yes	17.681
	Chemical Engineering Journal	Reviewer	Elsevier	Yes	16.744
	Bioresource Technology	Reviewer	Elsevier	Yes	11.889
	Applied Energy	Reviewer	Elsevier	Yes	11.446
Dr. Rahul Shrivastava	JAAD Case Reports	Reviewer	Elsevier	Yes	1.2
	Scientific Reports	Reviewer	Springer Nature Limited	Yes	5.134
	Frontiers in Microbiology	Reviewer	Frontiers Media	Yes	5.64
	Interdisciplinary Sciences: Computational Life Sciences	Reviewer	Springer	Yes	2.233
Dr. Saurabh Bansal	Biomass Conversion and Biorefinery	Reviewer	Springer	Yes	4.987
	3Biotech	Reviewer	Springer	Yes	2.406
	Environmental Sustainability	Reviewer	Springer	No	NA
	Amylase	Reviewer	De Gruyter Open Access	No	NA
	Journal of Plant Biochemistry and Biotechnology	Reviewer	Springer	Yes	1.525

- Students

Name of Students, Enrolment No.	Semester	Award in full details	Date	Achievement
Priyanka Shukla 181831	B.Tech 8 <sup>th</sup>	Undergraduate presentation-Third Prize. Priyanka Shukla, Chhavi Thakur, Jata Shankar. In-Silico Study of Phytochemicals, Vitamins and Drugs against SARS-CoV-2 Main Protease. 8-9 March 2022, 11th annual University of West Alabama Research Symposium (URS), USA	09-03-2022	Undergraduate presentation-Third Prize 11th annual University of West Alabama Research Symposium (URS), USA
Simran Gohan	B.Tech 7 <sup>th</sup>	Best Poster at CRISPR-2021, the first National Conference on 'CRISPR/Cas: From Biology to Technology'	25-27 November 2021	Department of Biological Sciences, SRM University-AP, Andhra Pradesh and the Institute of Bioinformatics and Applied Biotechnology, Bengaluru.
Simran Gohan	B.Tech 7 <sup>th</sup>	The best E-Poster award in the Virtual-National Conference on Transforming Trends in Life Sciences & Health Care	17 & 18 November 2021	Department of Biotechnology, Dwaraka Doss Goverdhan Doss Vaishnav College, Chennai, in association with Indian Science Congress Association (Chennai chapter)

- **Composition of Board of Studies (BOS)**

<b>Sr. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Institution</b>
1	Dr. Sudhir Kumar	<b>Professor and Head</b> , Dept. of BT & BI	JUIT
2	Dr. Anil Kant	Associate Professor, Dept. of BT & BI	JUIT
3	Dr. TC Bhalla	Professor (Retd.), Dept. of BT	HPU, Shimla
4	Mr. Girish Minocha	Managing Director	Minchys Industries, Shoghi& Kandaghat
5	Dr. Vinay Bhardwaj	Head, Division of Crop Improvement	CPRI, Shimla
6	Prof. G .P. S. Raghava,	Prof and Head, Dept of Computational Biology	IIIT-Dehli
7	Mr. Aditya Sahni	Alumni, Dept. of BT & BI	JUIT Waknaghat
8	Dr. Tiratha Raj Singh	Associate Professor, Dept. of BT & BI	JUIT Waknaghat
9	Dr. Saurabh Bansal	Assistant Professor (Senior Grade), Dept. of BT & BI	JUIT Waknaghat
10	Prof. (Dr.) Vivek Sehgal	Head Dept. of CSE and IT	JUIT Waknaghat
11	Dr. Rajiv Kumar	Head, <b>Dept. of ECE</b>	JUIT Waknaghat
12	Prof. (Dr.) P.B. Barman	Professor and Head, <b>Dept. of PMS</b>	JUIT Waknaghat
13	Prof. (Dr.) Karanjeet Singh	Professor and Head, <b>Dept. of Maths</b>	JUIT Waknaghat
14	Prof. (Dr.) Ashish Rohilla	Professor and Head, <b>Dept. of CE</b>	JUIT Waknaghat
<b>15</b>	Dr. Anupriya Kaur	Associate Professor and Head, Dept. of HSS	JUIT Waknaghat



## **DEPARTMENT OF CIVIL ENGINEERING**

### **Department Vision and Mission**

#### ▪ **Vision**

To strive for excellence, knowledge creation and research contribution in the field of Civil Engineering and to serve the society and the nation with missionary zeal. thus, to be recognized internationally as one of the best centers of research and education in all the areas of Civil Engineering.

#### ▪ **Mission**

To provide a vibrant educational environment to the students in the competitive field of Civil Engineering keeping in view the emerging infrastructural needs of the country as well as the emphasis on IT-enabled Civil Engineering profession.

To keep pace with the advances in Civil Engineering techniques and technologies to provide training and skills for creative, innovative, and ethical attitude without losing academic focus.

To provide state-of-the-art skills and knowledge in multi-disciplinary and multi-domain operations to the undergraduate and graduate students; so, they may emerge as leaders in the world of Civil Engineering and highly sought-after professionals to serve the nation and the society.

#### • **Faculty Details**

<b>S No</b>	<b>Faculty</b>	<b>Qualification</b>	<b>Specializations</b>
1	Ashok Kumar Gupta	Ph.D.	Constitutive Modeling of Geological Materials, Rock Mechanics and FEM
2	Ashish Kumar	Ph.D.	Scouring around Hydraulic Structures, Fluvial Hydraulics
3	Rajiv Ganguly	Ph.D., Post Doctorate	Air pollution, Estimation of NO <sub>x</sub> / CO Concentrations
4	Amardeep	Ph.D.	Transportation Engineering, Traffic Operation and Analysis, Pedestrian Behaviour, Pavement Materials
5	Arnav Anuj Kasar	Ph.D.	Structural Dynamics, Blast resistant materials
6	Rishi Rana	Ph.D.	Environmental Engineering, Solid Waste Management, Life Cycle Assessment
7	Saurav	Ph.D.	Concrete Rheology, Development of HPC with Alcofine

8	Saurabh Rawat	Ph.D.	Slope Stability problems (including Seismic), Soil-nailing, Landfill Design
9	Sugandha Singh	Ph.D.	Structural dynamics, Earthquake engineering, Structural analysis, Multihazard risk assessment.
10	Tanmay Gupta	Ph.D.	Structural behavior of RCC and Composite Bridges, FEA of Concrete Structures, Seismic behavior of Concrete bridges.
11	Chandra Pal Gautam	M.Tech, Ph.D. (Pursuing)	Rehabilitation of Structure, Concrete Technology, Fracture Mechanics
12	Kaushal Kumar	M.Tech, Ph.D. (Pursuing)	Structural Dynamics and Earthquake Engineering; Service Life Assessment of Structures, Structural Modeling and Analysis
13	Niraj Singh Parihar	M.Tech, Ph.D. (Pursuing)	Liquefaction, Slope Stability, Hazard Assessment
14	Akash Bhardwaj	M.Tech, Ph.D. (Pursuing)	Urban Planning, Transportation Planning, Urban Housing, Water Treatment Processes
15	Rohan Singhal	M.Tech	Concrete technology, Construction technology and management.
16	Akhilesh Gandhi	M.Tech	Construction materials, Sustainability aspect of infrastructure projects, Operation and supply chain management.

## **PROGRAMS**

- **Undergraduate Programs**

The undergraduate program has been specially designed keeping in view of the emerging civil infrastructure needs of the country as well as the modern emphasis on IT enabled Civil Engineering courses. The curriculum has been prepared to keep it more practical and industry oriented without losing its academic focus.

From the academic session 2022-23, the department is going to offer B.Tech in civil engineering with computer applications. The department of civil engineering offers cutting edge inter disciplinary 4-year B.Tech degree programme in civil engineering with computer application, which is a new emerging trend. Present day practice of civil engineering applications in real life include design of smart highway systems, sensor based technology for monitoring of pollution, cyber security of buildings, use of data analysis techniques to check feasibility of construction projects, use of AI systems for predicting soil and rock properties, use of ML in identifying hydrological responses in a catchment after precipitation and many more applications. The purpose of this programme is to produce under graduates who are

fully prepared to work in an engineering positions requiring expertise in the field of computer applications so as to apply the same in infrastructure industry.

- **Post Graduate Programs**

- **M.Tech (Construction Management)**

This 2-year program aims to impart domain specific knowledge in areas like Construction Techniques, Construction Equipment's, Safety, Planning; Contracts, Financial Management, Sustainable Design; Human Resource Management, Affordable Housing, Value Engineering and Construction Information Systems through suitable core/compulsory and elective subjects, and capstone projects and thesis work.

- **M.Tech (Environmental Engineering)**

The 2-year M. Tech program in Environmental Engineering aims to develop competent professionals including consultants, scientists, and technocrats in the field of environmental engineering having requisite skills to solve complicated and practical problems, develop effective communication skills and can work in multifaceted and diverse groups. Beside elective subjects, the course has project work and thesis in the final year.

- **M.Tech (Structural Engineering)**

This 2-year program has been designed to provide knowledge in the areas like Structural Dynamics. Design of Tall Buildings, Repair and Retrofitting of Structures, Modelling and Simulation, Bridge Engineering, Advance RCC and Steel Design, FEM, etc. through suitable core/compulsory & elective subjects, projects in two parts and thesis work in the final year. The main objective of the program is to prepare the students for working in Structural Design teams and if they wish, carry out research in the relevant fields.

- **PhD Program**

The Department carries out research and development activities in the areas Rock fill material modeling, Constitutive modeling, FEM in Geotechnical Engineering, Soil plasticity, Slope stability problems (including seismic), Soil-nailing, Landfill design, Fluvial hydraulics, Scouring, Flow of water around hydraulic structures such as bridge piers and abutments, Concrete rheology, Development of HPC with Alcofine, micro-silica, etc., Composite materials, Prestressed concrete, Dynamic analysis of structures subjected to extreme loading, and earthquakes, Seismic evaluation of existing buildings, Active and passive control of tall structures against earthquakes, Smart structures, Air pollution, Estimation of NO<sub>x</sub> / CO concentrations, and Solid-waste management, Pavement Materials, Design and Maintenance, Optimization Techniques, and development of mini-standard penetration test.

- **Lab Facilities**

### **New Equipments**

<b>SI No</b>	<b>Name of Apparatus</b>	<b>Supplier Name</b>	<b>Quantity</b>	<b>Lab</b>
1	Triaxial Test Pure Pressure and Saturation Tester	Axis Technologies Dehradun	1	Geotech
2	Concrete Test Hammer	Avantech Engineering	1	concrete
3	Ultrasonic Pulse Velocity Tester	Avantech Engineering	1	concrete
4	Cover Meter / Rebar	Avantech Engineering	1	concrete
5	Half Cell Potential Tester	Avantech Engineering	1	concrete
6	Le-Chatelier Apparatus	Prasoon Test House New Delhi	2	Concrete
7	Dial Gauge	Prasoon Test House New Delhi	1	Concrete
8	Cylindrical mould(10cm dia,20cm height)	Prasoon Test House New Delhi	3	Concrete
9	Cube Mould(15 ×15cm Size)	Prasoon Test House New Delhi	3	Concrete
10	Le-Chatilar Flask	Prasoon Test House New Delhi	2	Concrete
11	Le-Chatilar Apparatus	Prasoon Test House New Delhi	2	concrete
12	Impact Of Jet	Axis Technologies Dehradun	1	Fluid
13	Venturimeter	Axis Technologies Dehradun	1	Fluid
14	Density Basket	Prasoon Test House New Delhi	1	Highway
15	Weighing Balance	Prasoon Test House New Delhi	1	Highway
16	Digital Hanging Scale	Prasoon Test House New Delhi	1	Highway
17	Core Cutter Diesel engine Opreted	Prasoon Test House New Delhi	1	Highway
18	Softening Point Apparatus	Prasoon Test House New Delhi	1	Highway
19	Viscometer Meter	Prasoon Test House New Delhi	1	Highway
20	Laser Distance Meter	Axis Technologies Roorkee	1	Surveying

21	Air Flow Meter	Axis Technologies Roorkee	1	Surveying
22	Dell Workstation	JIL Information Technology Ltd	1	Project
23	Realme Pad	Health & Happiness Pvt Ltd	1	Project
24	Uniaxial Shake Table	GEOTRAN	1	Project

- **Lab Staff**

Name	Designation	Qualification
Mr Jaswinder Singh	Lab Technician	Diploma, Civil Engineering
Mr Amar Kumar	Lab Technician	Diploma, Civil Engineering
Mr Rajesh Sahu	Lab Technician	Diploma in CSE
Mr Itesh Kumar Singh	Lab Assistant	BTech, Civil Engineering BSc
Mr Pradeep Kumar	Jr Lab Assistant	
Mr Ashish	Lab Boy	

- **Labs**

1	Chemistry Laboratory
2	CAD/Software laboratory
3	Engineering Graphics laboratory
4	Workshop Practices Laboratory
5	Fluid Mechanics Laboratory
6	Concrete Technology Laboratory
7	Highway Engineering Laboratory
8	Environmental Engineering Laboratory (shared with Chemistry Laboratory)
9	Geotechnical Engineering Laboratory
10	Structural Mechanics Laboratory
11	Survey Laboratory (storage only)
12	Research laboratories - Fluvial Hydraulics Lab
13	Computational Research Lab

- **List of Major Equipments**

1. Triaxial Shear Test Apparatus
2. Los angles Abrasion testing machine
3. Ductility testing machine
4. Laboratory C.B.R. apparatus
5. Aggregate crushing value apparatus 30 cm
6. Concrete flow table
7. Direct Shear Test Apparatus
8. Benkelman Beam, Digital
9. Marshall Test Apparatus (Digital)
10. Automatic Compactor for Marshall mould of 100mm diameter
11. Digital Humidity Chamber/Cabinet
12. Electronic Total Station SET 610
13. Accelerated Curing Tank
14. Universal Testing Machine
15. Respirable Dust Sampler
16. Total Station
17. Spectrophotometer
18. Multiparameter Testing Apparatus (pH/BOD)
19. Unconfined Compression test Apparatus
20. Dynamic Cone Penetration Test Apparatus (DCPT)
21. Triaxial Electronic Conversion Kit
22. Hobart Mixer MADE IN U.S.A./GERMANY
23. Flexural Testing Machine capacity – 20 ton (Electrically operated)
24. Compression Testing Machine capacity – 200-ton Digital (Electrically Operated)
25. Lathe Machine 4.5 Feet Long.
26. Milling Machine
27. Furnace (Maximum Temperature 1200 °C)
28. .10m long 0.75m wide and .06m deep rectangular open channel flume

- **List of Software**

Sl. No.	Name of Software	Version
1	AutoCAD Student	2018
2	Autodesk Revit	2018
3	Autodesk Software Suite includes about 100 Software	2018 or later
4	STAAD.pro	CONNECT Edition V22
5	STADD Foundation/ Advance Foundation	CONNECT Edition V22
6	Bentley S/W Suite includes about 200 software's like Water Gams, Water CAD etc.	CONNECT Edition V22
7	MX ROAD / OPEN ROADS	CONNECT Edition V22

8	PRIMAVERA	P6.1
9	Geo5	V18
10	ESTIMATOR	2
11	ANSYS	12.1
12	PLAXIS 2D	2010
13	Simula Academic includes SIMULIA Abaqus, SIMULIA Isight, SIMULIA Tosca & SIMULIA Fesafe	2019
14	MS PROJECT	2003

- **Equipments**



1. Jar Test Apparatus 2. Hot Bath Apparatus 3. Respirable Dust Sampler 4. COD Digester

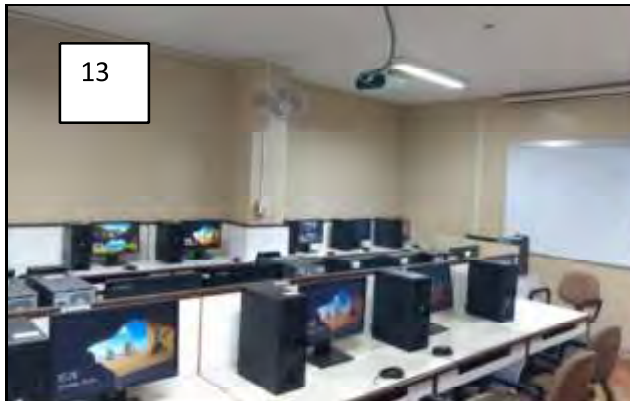


5. Civil Engineering Software Lab    6.Ductility Apparatus    7.CBR Testing Machine    8. Bitumen Extractor/ Marshall Mould Sampler



9. Compression Testing Machine    10. Flexural Strength Testing Apparatus  
11. Soil Pulling Apparatus    12. Humidity Apparatus





13



15



14



16

13. Civil Engineering Software Lab

14. Direct Shear Test Apparatus

15. Triaxial Shear Test Apparatus

16. Unconfined Compression Machine



17



18



19



20

17. Muffle Furnace

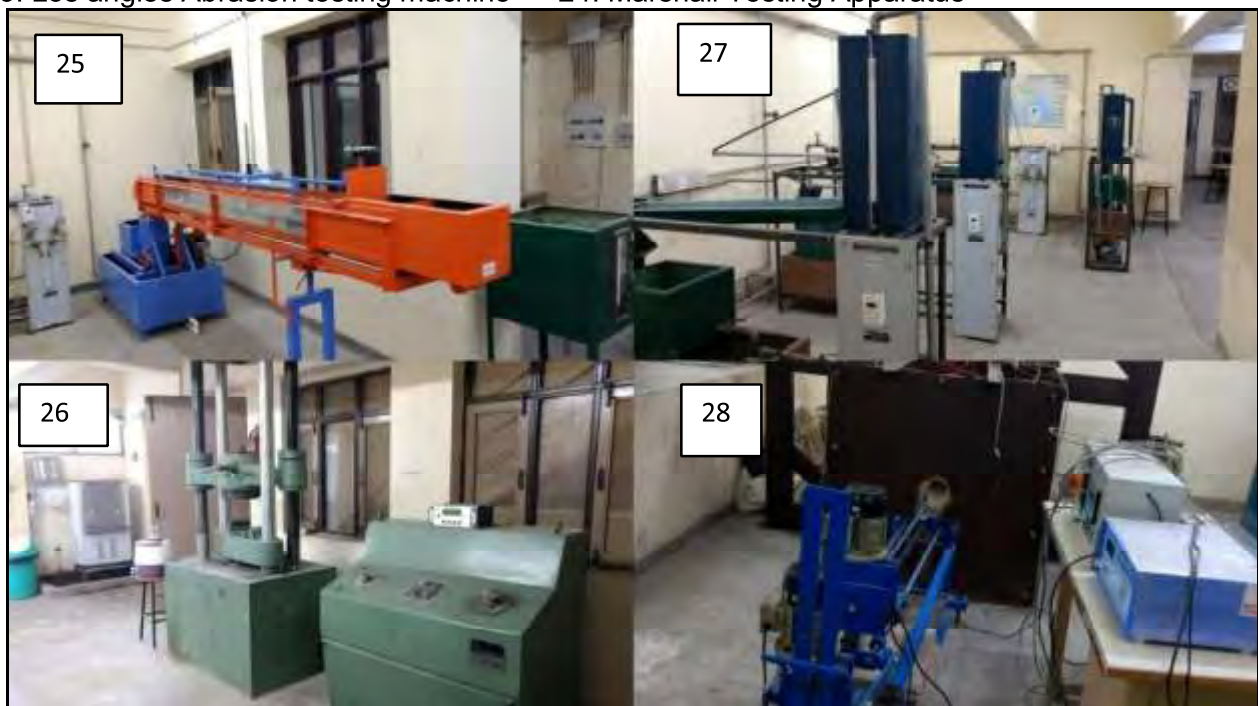
18. Water Distillation Setup

19. Kjeldahl Nitrogen Apparatus

20. BOD Incubator



21. Bitumen Mixer/ Impact Testing Machine 22. Hobart Mixer  
23. Los angles Abrasion testing machine 24. Marshall Testing Apparatus



25. Open Channel Flume 26. Universal Testing Machine  
27. Apparatus for conducting orifice experiments ( $C_d$ ,  $C_c$ ,  $C_v$ )  
28. Soil Pulling Machine





29. Biodegradation Settlement Analyzer      30. Consolidation Apparatus  
 31. Lathe machine/ Milling Machine  
 32. Oven



33. Biogas Incubator      34. Total Station/ Theodolite/ Auto Level/ Dumpy Level  
 35. Open Channel Flume      36. COD Digester/ pH Meter/ Conductivity Meter/ Turbidity Meter



37. Core Cutter Diesel Engine pressure and saturation tester



38. Impact of jet



39. Triaxial test pure



40. Cover meter/ rebar



41. Ultrasonic pulse velocity tester



42. Half cell potential tester

- **Patents**

S.No.	Patent No. and Date of Grant	Application no.	Title	Department and Inventors
1	NA	--	--	--

- **Research Projects Sanctioned during the Academic Year/In Progress**

S. No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1.	Prof Ashok Kumar Gupta, Dr Saurabh Rawat, Dr Tanmay, Sh Chandra Pal Gautam Gupta, Dr Vivek Sehgal, Dr Emjee Puthooran	Development of Landslide prediction sensors and Landslide Mitigation Technique” under the Centre of Excellence for Intelligent Evaluation and Rehabilitation of Structures.	Directorate of innovation, Research and Development, Jaypee Group	3.5 lakhs	6 months (2022-2023)	In progress
2.	Prof Ashok Kumar Gupta, Dr Tanmay Gupta, and Dr Saurabh Rawat	Geological Hazards mitigation using stone concrete block retaining walls and helical soil nailing”	District Disaster Management Authority Solan, HP	25 lakhs	3 years (2021-2024)	In progress
3.	Prof Ashish Kumar & Prof Sudhir Kumar	Pine Needles conversion to biofuel for rural empowerment.	Directorate of Innovation, Research and Development, Jaypee Group	7 lakhs	1 year (2022-2023)	In progress

- **Conferences, Seminars and Workshops/Faculty development program**

- **Conferences Organized**

<b>Dates</b>	<b>Subject</b>	<b>Venue/Participations</b>	<b>Faculty Name</b>	<b>Remarks</b>
12 <sup>th</sup> -13 <sup>th</sup> November 2021	1st International Conference on Structures, Material and Construction (ICSMC2021)	JUIT, Waknaghat and Online mode, 100 oral papers, more than 500 delegates	Dr Tanmay Gupta	Selected papers published with Springer in Lecture notes in Civil Engineering
12 <sup>th</sup> – 13 <sup>th</sup> , November, 2021	1st International Conference on Structures, Materials and Construction ICSMC 2021	JUIT, Waknaghat, Member of National Advisory Committee	Dr. Saurabh Rawat	Organizing committee

- **Conferences Attended**

<b>Dates</b>	<b>Subject</b>	<b>Venue</b>	<b>Faculty Name</b>	<b>Remarks</b>
21 <sup>st</sup> -22 <sup>nd</sup> April, 2022	Indo-European Conference on Sustainable Materials, Environment and Construction-II, 2022	Chandigarh University	Dr Amardeep	Attended, Paper has been accepted
12 <sup>th</sup> – 13 <sup>th</sup> , November, 2021	1st International Conference on Structures, Materials and Construction ICSMC 2021	JUIT Waknaghat	Dr Amardeep	Attended, Paper has been accepted
12 <sup>th</sup> – 13 <sup>th</sup> , November, 2021	1st International Conference on Structures, Materials and Construction ICSMC 2021	JUIT Waknaghat	Mr Akash Bhardwaj	Attended, Paper has been accepted
12 <sup>th</sup> – 13 <sup>th</sup> , November, 2021	1st International Conference on Structures, Materials and Construction ICSMC 2021	JUIT Waknaghat	Dr Saurav Kumar	Attended, Paper has been accepted
12 <sup>th</sup> – 13 <sup>th</sup> ,	1st International	JUIT	Mr Niraj Singh	Attended,

November, 2021	Conference on Structures, Materials and Construction ICSMC 2021	Waknaghat	Parihar	Paper has been accepted
6 <sup>th</sup> -8 <sup>th</sup> May, 2022	3rd international modern scientific research congress	Istanbul Gedik University, Istanbul, Turkey	Dr Tanmay Gupta	Presented paper in online mode
24 <sup>th</sup> -25 <sup>th</sup> December, 2021	ISPEC 12th international conference on engineering and natural sciences	ISPEC, Bingol, Turkey.	Dr Tanmay Gupta	Presented paper in online mode
12 <sup>th</sup> -13 <sup>th</sup> November 2021	1st International Conference on Structures, Material and Construction (ICSMC2021)	JUIT Waknaghat	Dr Tanmay Gupta	Conference Chair and Author
12 <sup>th</sup> – 13 <sup>th</sup> , November, 2021	1st International Conference on Structures, Materials and Construction ICSMC 2021	JUIT Waknaghat	Mr Kaushal Kumar	Attended, Paper has been accepted
12 <sup>th</sup> – 13 <sup>th</sup> , November, 2021	1st International Conference on Structures, Materials and Construction ICSMC 2021	JUIT Waknaghat	Dr Rishi Rana	Attended

- **Seminars**

- **Seminars Organized**

- **Webinars Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
12 <sup>th</sup> July, 2021	Lean Construction	JUIT, Waknaghat	Dr Tanmay Gupta	Online Mode
18 <sup>th</sup> September- 16 <sup>th</sup> October, 2021	Webinar Series on “Advanced Testing Technologies for Geotechnical Investigation”	JUIT, Waknaghat	Mr Niraj Singh Parihar & Mr. Rohan Singhal	Online Mode
23 <sup>rd</sup>	One Day Webinar	JUIT, Waknaghat	Mr Rohan	Online Mode

November, 2021	on "Fundamentals of Highway Designs"		Singhal	
27 <sup>th</sup> November, 2021	One Day Webinar on "Hands-on design of Composite Beams"	JUIT, Waknaghat	Dr Arnav Anuj Kasar	Online Mode
29 <sup>th</sup> January, 2022	One Day Webinar on "Glacial Lake Outburst Flood (GLOF): An Insight"	JUIT, Waknaghat	Dr Sugandha Singh	Online Mode

• **Seminars Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
4 <sup>th</sup> July, 2021	Geotechnique of Infrastructures	IGS Jabalpur	Mr Niraj Singh Parihar	Attended
11 <sup>th</sup> September, 2021	Awareness on NABL Accreditation	IGS Kanpur	Mr Niraj Singh Parihar	Attended and delivered a lecture
18 <sup>th</sup> September, 2021-16 <sup>th</sup> October, 2021	Advanced Testing Technologies for Geotechnical Investigation	JUIT(IGS Shimla)	Mr Niraj Singh Parihar	Organized and attended
13 <sup>th</sup> October, 2021	Raising of ash pond for augmented storage	IGS Guntur	Mr Niraj Singh Parihar	Attended
30 <sup>th</sup> October, 2021	Role of HP Patent Information Centre in filing the patents	JUIT Waknaghat	Mr Niraj Singh Parihar	Attended
13 <sup>th</sup> November, 2021	International Patent Filing	Turnip	Mr Niraj Singh Parihar	Attended
13 <sup>th</sup> November, 2021	Soil Nailing and Micro piles	Andhra University/IGS Vishakhapatnam	Mr Niraj Singh	Attended



			Parihar	
29 <sup>th</sup> October, 2021	Glacial Lake Outburst Flood	CED, JUIT	Mr Niraj Singh Parihar	Attended
21 <sup>st</sup> March, 2022	Planning and Construction of Long Tunnels in Himalayan Region	IGS	Mr Niraj Singh Parihar	Attended
6 <sup>th</sup> June, 2022	Geotechnical Characterization Of Dune Sand of The Thar Desert	IGS Jodhpur	Mr Niraj Singh Parihar	Attended
26 <sup>th</sup> January, 2022	Green Buildings	CED, JUIT	Mr Niraj Singh Parihar	Attended
17 <sup>th</sup> June,2022	Geotechnical Investigation in Difficult Soil Conditions	IGS Chandigarh	Mr Niraj Singh Parihar	Attended
29 <sup>th</sup> January, 2022	Glacial Lake Outburst Floods (GLOF): An Insight	JUIT, Waknaghat	Dr Tanmay Gupta	Centre of Excellence in Structural Engineering and Disaster Management, CED, JUIT
18 <sup>th</sup> September 2021- 16 <sup>th</sup> October 2021	Advanced Testing Technologies for Geotechnical Investigation	JUIT, Waknaghat	Dr Tanmay Gupta	Weekly seminars organized by CED JUIT in collaboration with IGS
4 <sup>th</sup> June 2022	Durability and Microstructure of Concrete	Online	Dr Tanmay Gupta	Webinar by Ultra Tech Cement Ltd in collaboration with Indian Concrete Institute
6 <sup>th</sup> -10 <sup>th</sup> June 2022	Design & Construction of Steel Structure	Vivekananda institute of technology, Bengaluru	Dr Tanmay Gupta	5 days national webinar by VIT Begaluru, INSDAG and CIDA

11 <sup>th</sup> June 2022	Enhancing the Performance and Durability of Concrete through Nanotechnology	Online	Dr Tanmay Gupta	Webinar by UltraTech Cement Ltd in collaboration with Indian Concrete Institute
15 <sup>th</sup> June 2022	Risk Communication and Community Engagement in Context of COVID19	National Centre for Disease Control (NCDC) U.S. Centers for Disease Control and Prevention (CDC)	Dr Tanmay Gupta	Organized by NIDM,MHA in association with NCDC in online mode
17 <sup>th</sup> June 2022	Leveraging Geospatial Technology in Disaster Management	National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India	Dr Tanmay Gupta	Organized by NIDM,MHA in online mode
22 <sup>nd</sup> June 2022	Safe, Sustainable and Resilient Health Infrastructures, Systems and Services	National Centre for Disease Control (NCDC) U.S. Centers for Disease Control and Prevention (CDC)	Dr Tanmay Gupta	Organized by NIDM,MHA in association with NCDC in online mode
30 <sup>th</sup> June 2022	Sensitization of Policy Makers and administrators on climate change and its impact on mountain ecosystem	HIMCOSTE, HHH Shimla	Dr Tanmay Gupta	One day face to face seminar by SCCC HIMCOSTE
28 <sup>th</sup> February, 2022	National Science Day Symposium (NSDS 2022)	JUIT Waknaghat	Akash Bhardwaj	Attended
29 <sup>th</sup> January, 2022	Glacial Lake Outburst Flood (GLOF): An Insight	JUIT Waknaghat	Akash Bhardwaj	Attended
12 <sup>th</sup> July, 2021	Lean Construction	JUIT, Waknaghat	Dr Rishi Rana	Attended
18 <sup>th</sup> September	Webinar Series on "Advanced Testing	JUIT, Waknaghat	Dr Rishi	Attended

-16 <sup>th</sup> October, 2021	Technologies for Geotechnical Investigation”		Rana	
23 <sup>rd</sup> November, 2021	One Day Webinar on “Fundamentals of Highway Designs”	JUIT, Waknaghat	Dr Rishi Rana	Attended
27 <sup>th</sup> November, 2021	One Day Webinar on “Hands-on design of Composite Beams”	JUIT, Waknaghat	Dr Rishi Rana	Attended
28 <sup>th</sup> February 2022	National Science Day Symposium (NSDS 2022)	JUIT Waknaghat	Dr Rishi Rana	Attended
20 <sup>th</sup> July, 2021	Webinar on “ Cloud Computing Security”	Madanapalle Institute of Technology and Science, Andhra [Pradesh	Dr Rishi Rana	Attended

- **Workshops**
- **Workshops Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Participation</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
4 <sup>th</sup> – 9 <sup>th</sup> October 2021	“Innovative Solutions for Sustainable Constructions in Civil Engineering”	JUIT Waknaghat	HPPWD Officials, Academicians, Research Scholars, More than 70 participants were joined in the workshop	Dr Amardeep	4 – 9 <sup>th</sup> October 2021
18 <sup>th</sup> September, 2021-16 <sup>th</sup> October, 2021	Advanced Testing Technologies for Geotechnical Investigation	JUIT(IGS Shimla)	IGS Members, Academicians, Research Scholars and Practitioners, More than 230 participants were joined in the webinar series	Mr Niraj Singh Parihar	18 <sup>th</sup> to 16 <sup>th</sup> October, 2021

12 <sup>th</sup> July 2021	Lean construction techniques	JUIT, Wagnaghat and online	80 participants. In collaboration with Indian Green Building Council	Dr Tanmay Gupta	12 <sup>th</sup> July 2021
25 <sup>th</sup> January 2022	Various Aspects of Green Building Design	JUIT, Wagnaghat and online	100 participants. In collaboration with Indian Green Building Council	Dr Tanmay Gupta	25 <sup>th</sup> January 2022
21 <sup>st</sup> June 2022	Advanced Structural Design with STAAD Pro	JUIT, Wagnaghat and online.  15 HPPWD officers	For HPPWD officials Design team	Dr Tanmay Gupta	For HPPWD officials Design team

• **Workshops Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
9 <sup>th</sup> June, 2022	Environment and Sustainability	Jaypee Institute of Information Technology, Noida	Prof Ashish Kumar	Attended Online
2 <sup>nd</sup> July, 2021-7 <sup>th</sup> August, 2021	Short Term Course on 'Practical Aspects of Geotechnical engineering investigation from design perspective'	IGS Guntur	Niraj Singh Parihar	Attended
25 <sup>th</sup> June, 2022	Geosynthetics and its applications	IGS Varanasi	Niraj Singh Parihar	Attended
4 <sup>th</sup> – 9 <sup>th</sup>	Innovative Solutions for Sustainable	Online - Department of civil Engineering, JUIT	Saurabh Rawat	Attended

October 2021	Constructions in Civil Engineering			
4 <sup>th</sup> – 9 <sup>th</sup> October 2021	“Innovative Solutions for Sustainable Constructions in Civil Engineering”	JUIT Waknaghat,	Akash Bhardwaj	Virtual Mode
4 <sup>th</sup> – 9 <sup>th</sup> October 2021	“Innovative Solutions for Sustainable Constructions in Civil Engineering”	JUIT Waknaghat	Dr Rishi Rana	Attended Virtual Mode
21 <sup>st</sup> June 2022	Advanced Structural Design with STAAD Pro	JUIT Waknaghat	Dr Rishi Rana	Attended Virtual Mode
3 <sup>rd</sup> July, 2021- 3 <sup>rd</sup> September, 2021	Industrial Revolution 4.0	Department of ECE, JUIT Waknaghat	Dr Rishi Rana	Attended Virtual Mode
9 <sup>th</sup> June, 2022	Environment and Sustainability	Jaypee Institute of Information Technology, Noida	Dr Rishi Rana	Attended Online
4 <sup>th</sup> -09 <sup>th</sup> October 2021	Innovative Solutions for sustainable constructions in Civil Engineering	JUIT, Waknaghat	Dr Tanmay Gupta	One week online workshop
14 <sup>th</sup> -16 <sup>th</sup> June 2022	Training on Disaster Risk Reduction and Management in collaboration with Central University Gujarat, Gandhinagar	School of Environment and Sustainable Development Central University Gujarat Gandhinagar	Dr Tanmay Gupta	Organized by NIDM,MHA in association with CU Gujrat in online mode
14 <sup>th</sup> - 16 <sup>th</sup> June 2022	Industrial Safety and Disaster Management	Online	Dr Tanmay Gupta	Organized by NIDM,MHA in association with FICCI in online mode
15 <sup>th</sup> -17 <sup>th</sup> June 2022	Forest Fire Risk Mitigation and Management - Training of the Trainers"	Himachal Pradesh State Disaster Management Authority and Himachal Pradesh Institute of Public Administration	Dr Tanmay Gupta	Organized by NIDM,MHA in association with HPDMA and HPIPA
20 <sup>th</sup> -22 <sup>nd</sup> June 2022	Application of Remote Sensing and GIS in Disaster Risk Management	National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India	Dr Tanmay Gupta	Organized by NIDM,MHA in online mode
28 <sup>th</sup> -30 <sup>th</sup> June 2022	Intersectionality Approach for Securing	All India Disaster Mitigation Institute	Dr Tanmay	Organized by NIDM,MHA

	Women Livelihoods Food and Security Nutrition Towards Disaster Resilience Building Agenda for APMCDRR	(AIDMI)	Gupta	in association with AIDMI in online mode
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• **Faculty Development Program –**

▪ **FDPs Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Participation</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
NIL	NIL	NIL	NIL	NIL	NIL

▪ **FDPs Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
6 <sup>th</sup> – 10 <sup>th</sup> December, 2021	AICTE Training and Learning (ATAL Academy)- Flow characteristics and Turbulence statistics in alluvial channels	L.D. College of Engineering, Ahmadabad	Prof Ashish Kumar	Attended (Online)
21 <sup>st</sup> – 26 <sup>th</sup> Feb, 2022	NAAC workshop	Jharkhand Govt., Tool room Ranchi	Saurabh Rawat	Attended
9 <sup>th</sup> May – 1 <sup>st</sup> July 2022	NNRMS – Course on RS and GIS	IIRS Dehradun (ISRO)	Akash Bhardwaj	Certified with A+ grade
9 <sup>th</sup> -13 <sup>th</sup> May, 2022	NEP 2020 Implementation in Higher Education Institutes	JUIT, Wagnaghat	Akash Bhardwaj	Attended
9 <sup>th</sup> -13 <sup>th</sup> August 2022	Disaster Resilience Infrastructure	University Institute of Technology HPU- Shimla.	Dr Tanmay Gupta	AICTE Training and Learning (ATAL) Academy Online Elementary FDP
26 <sup>th</sup> -28 <sup>th</sup> May 2022	Geotechnical Engineering Practices & its Sustainable Development	Ballari Institute of Technology and Management, BELAGAVI	Dr Tanmay Gupta	3 days online FDP organized by BITM Belgavi and BITM, Ballari
21 <sup>st</sup> -25 <sup>th</sup> June 2022	Emerging Technologies in Civil Engineering for construction	Rajshree Institute of Management and Technology, Bareilly	Dr Tanmay Gupta	5 days online FDP by CED, RIMT Bareilly

	and Demolition waste			
9 <sup>th</sup> May- 13 <sup>th</sup> May, 2022	NEP 2020 Implementation in Higher Education Institutes	JUIT, Wagnaghat	Dr Rishi Rana	Attended

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Prof A.K. Gupta	Effect of Degradation of Municipal Solid Waste on the Shear Strength Behavior from a Dump Site in Una Town, Himachal Pradesh.	Journal of Solid Waste Technology and Management	48 (1), 147-160	
Prof A.K. Gupta & Dr Saurabh Rawat	Experimental investigation of helical soil nails group behavior under torque installation and monotonic pullout loading.	Arabian Journal of Geosciences	Volume 14, Article number: 1376. <a href="https://doi.org/10.1007/s12517-021-07840-7">https://doi.org/10.1007/s12517-021-07840-7</a>	<a href="https://doi.org/10.1007/s12517-021-07840-7">https://doi.org/10.1007/s12517-021-07840-7</a>
Prof A.K. Gupta & Dr Saurabh Rawat	Consolidation and bearing capacity studies on solid waste ash fill by using hybrid granular piles	Innovative Infrastructure Solutions	<a href="https://doi.org/10.1007/s41062-021-00664-0">https://doi.org/10.1007/s41062-021-00664-0</a>	<a href="https://doi.org/10.1007/s41062-021-00664-0">https://doi.org/10.1007/s41062-021-00664-0</a>
Prof Ashish Kumar	Energy possibilities and future strategies for municipal solid waste in Himachal Pradesh	Materials Today: Proceedings	48 (5), 1455-1459	
Prof Ashish Kumar	Managing sewage sludge and pine needles through anaerobic co-digestion in a hilly terrain: a lost cost approach	International Journal of Environment and Waste Management	28 (1), 61-75	
Dr Saurav	Experimental Investigation of Bond strength	Journal of Engineering Research	(Special Issue), 1-14	

	Autoclaved Aerated Concrete (AAC) Masonry.			
Dr Saurav	Autoclaved aerated concrete (AAC) shear and tensile bond strengths with various mortar formulations and thicknesses.	Journal of Engineering Research	(Special Issue), 1-15	
Dr Saurav	Evaluation of cost Effectiveness of using autoclave aerated concrete (ACC) blocks in building construction.	Materials Today: Proceedings	51 (1), 1063-1068	
Dr Saurav	Optimization Assessment of a Jib Crane Beam with Variable Web Corrugations Using Finite Element Analysis.	Journal of Failure Analysis and Prevention	21 (November 2021), 2150-2159	
Dr Amardeep	Experimental investigation and prediction of strength development of GGBFS, LFS, and SCBA based green concrete using soft computing techniques	Arabian Journal of Geosciences	14 (2612 (2021))	
Prof A.K. Gupta & Dr Amardeep	Geotechnical characteristics of clayey soil admixed with municipal solid waste incineration ash, cement and polypropylene fiber.	Innovative Infrastructure Solutions	Innovative Infrastructure Solutions, 6 (Article number: 193),	
Dr Amardeep	Statistical Analysis for Assessing the Built Environment Walkability of an Urban Area	European Transport - Trasporti Europei,	European Transport - Trasporti Europei, 82 (June 2021)	
Prof A.K Gupta & Dr Amardeep	Sub-grade Characteristics of Clayey Soil incorporating	Journal of Engineering, Design and Technology	20 (3), 712-726	



	Municipal Solid Waste Incineration Ash and Marble Dust.			
Dr Tanmay Gupta	Hilly Road mapping and holistic management to visualize and plan construction: A case study in Himalayan region	Turkish online journal of qualitative inquiry Volume 12, Issue 3, July 2021	<a href="https://tojqi.net/index.php/journal/article/view/2707">https://tojqi.net/index.php/journal/article/view/2707</a>	
Dr Tanmay Gupta	Seismic response of horizontally curved bridges in combination with skewed abutments	Structures, Volume 36,	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352012421011863?via%3Dihub">https://www.sciencedirect.com/science/article/abs/pii/S2352012421011863?via%3Dihub</a>	

• **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Prof A.K. Gupta	Risk Assessment of Biomedical wastes generated in hospitals of Chandigarh and Shimla, India	Urban Solid Waste Management Issues and Challenges of Sustainability	Palm view Publications. [ISBN: 978- 8195057245], pp. 51-61.	
Prof A.K. Gupta	Advances in Construction Materials and Sustainable Environment.	Advances in Construction Materials and Sustainable Environment.	Switzerland: Springer Nature. [ISBN : 978-981-16-6557-8]	
Prof A.K. Gupta & Niraj Singh Parihar	Effect of curing on compressive and shear strength parameters of liming waste ash stabilized expansive soil	Advances in Construction Materials and Sustainable Environment	Lecture Notes in Civil Engineering(Springer), Vol.196, pp 1035-1046 <a href="https://doi.org/10.1007/978-981-16-6557-8_83">https://doi.org/10.1007/978-981-16-6557-8_83</a>	
Prof A.K. Gupta	Axial Loading Behaviour of Concrete Filled Steel Tube (CFST)	Advances in Construction Materials and Sustainable Environment	Advances in Construction Materials and Sustainable Environment (pp. 873-883). Singapore: Springer. [ISBN : 978-981-16-6556-1]	

	Columns: A Parametric Study.			
Prof A.K. Gupta	Corrosion Monitoring in Reinforced Concrete Structures by Impressed Current Technique.	Advances in Construction Materials and Sustainable Environment	Advances in Construction Materials and Sustainable Environment (pp. 823-835). Singapore: Springer. [ISBN : 978-981-16-6556-1]	
Prof A.K. Gupta & Akash Bhardwaj	Traffic Analysis on Intersection Using PTV Vissim	Advances in Construction Materials and Sustainable Environment	Advances in Construction Materials and Sustainable Environment (pp. 481-489). Singapore: Springer. [ISBN : 978-981-16-6556-1]	
Prof. A.K. Gupta & Dr Saurabh Rawat	Evaluating Factors Affecting Red Mud Interfacial Strength Using Binder Cement Kiln Dust and Polypropylene Fiber	Advances in Construction Materials and Sustainable Environment	Advances in Construction Materials and Sustainable Environment (pp. 295-304). Singapore: Springer. [ISBN : 978-981-16-6556-1]	<a href="https://doi.org/10.1007/978-981-16-6557-8_23">https://doi. org/10.100 7/978- 981-16- 6557-8_23</a>
Prof Ashish Kumar	Co-Digestion of Lignocellulosic Wastes with Food Waste for Sustainable Biogas Production.	Microbial Biotechnology for Renewable and Sustainable Energy	Microbial Biotechnology for Renewable and Sustainable Energy (pp. 77-97). Singapore: Springer. [ISBN : 978-981-16- 3852-7]	<a href="https://doi.org/10.1007/978-981-16-3852-7_4">https://doi. org/10.100 7/978- 981-16- 3852-7_4</a>
Dr Amardeep	Mechanical Properties of Concrete Containing Plastic Fiber	Advances in Construction Materials and Sustainable Environment	Singapore: Springer. [ISBN : 978-981-16-6556-1]	
Dr Amardeep	Examination of Platooning Variables on Two-Lane Highways Having Mixed Traffic Situation.	Advances in Construction Materials and Sustainable Environment	Singapore: Springer. [ISBN : 978-981-16-6556-1]	
Dr Amardeep	Walkability Analysis of an	Advances in Construction	Singapore: Springer. [ISBN : 978-981-16-6556-1]	

	Urban Area: Gender-Based and Combined Model Approach.	Materials and Sustainable Environment		
Dr Amardeep	State of Art: Review for Sustainable Application of Waste Material in Rigid Pavement	Advances in Construction Materials and Sustainable Environment	Singapore: Springer. [ISBN : 978-981-16-6556-1]	
Dr Amardeep	Improving Highway Alignment Using Open roads Software	Structural Engineering and Construction Management	volume 171), pp. 539-550). : Springer, Cham. [ISBN : 978-3-030-80312-4]	
Dr Rishi Rana	Potential for use of Treated Waste Water for Industrial Reuse in India.	Wastewater Assessment, Treatment, Reuse and Development in India , Earth and Environmental Sciences	Springer. [ISBN : 978-3-030-95785-8 ]	
Dr Rishi Rana & Kaushal Kumar	Estimation of Methane Generation from Municipal Solid Waste of Mohali Landfill Site	Advances in Construction Materials and Sustainable Environment	Lecture notes in civil engineering (LNCE, volume 196) (2022, pp. 585–595). Singapore: Springer. [ISBN : 978-981-16-6556-1]	
Kaushal Kumar & Dr Rishi Rana	Analysis of Critical Factors Affecting Labor Productivity of Construction Projects in Himachal Pradesh	Advances in Construction Materials and Sustainable Environment	Lecture notes in civil engineering ( LNCE, volume 196) (2022 pp.1047-1058	
Dr Saurav	Structural Health Monitoring Through the Application of Piezoelectric	In Ashok Kumar Gupta, Sanjay Kumar Shukla, Hazi Azamathulla, Advances in	(pp. 657-673). Switzerland: Springer Nature. [ISBN : 978-981-16-6557-8]	

	Sensors State of the Art Review.	Construction Materials and Sustainable Environment		
Dr Saurabh Rawat	Minimization of Risks in Highway Projects Using Buffer.	In: Gupta A.K., Shukla S.K., Azamathulla H. (eds) Advances in Construction Materials and Sustainable Environment. Lecture Notes in Civil Engineering, vol 196. Springer, Singapore	<a href="https://doi.org/10.1007/978-981-16-6557-8_37">https://doi.org/10.1007/978-981-16-6557-8_37</a>	
Dr Saurabh Rawat	Study of Slope Stability Using Flexible Facing	In: Gupta A.K., Shukla S.K., Azamathulla H. (eds) Advances in Construction Materials and Sustainable Environment. Lecture Notes in Civil Engineering, vol 196. Springer, Singapore	<a href="https://doi.org/10.1007/978-981-16-6557-8_61">https://doi.org/10.1007/978-981-16-6557-8_61</a>	
Dr Tanmay Gupta	Analytical Investigation of Moment Resisting Frame Structure – A case study on Performance-Based Capacity spectrum method	Advances in Construction Materials and Sustainable Environment, Lecture Notes in Civil Engineering, vol 196, pp 735-745	<a href="https://link.springer.com/chapter/10.1007/978-981-16-6557-8_60">https://link.springer.com/chapter/10.1007/978-981-16-6557-8_60</a>	
Dr Tanmay Gupta	Comparative Investigation on Mode Shapes and Natural	Advances in Construction Materials and Sustainable Environment,	<a href="https://link.springer.com/chapter/10.1007/978-981-16-6557-8_72">https://link.springer.com/chapter/10.1007/978-981-16-6557-8_72</a>	

	Frequency of Low-Rise RC Frame Building	Lecture Notes in Civil Engineering, vol 196, pp 735-745		
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• **Conference Publications**

<b>Name of Faculty</b>	<b>Title of Article presented</b>	<b>Name of conference</b>	<b>Reference</b>	<b>Dates</b>
Dr Saurav	Mechanical properties and development of light weight concrete by using autoclaved aerated concrete (AAC) with aluminum powder.	Proceedings of the International Conference on Design and Materials (ICDM-2021)	1st : Delhi Technological University (DTU), Delhi, India : December 26-27, 2021]	December 26-27, 2021]
Dr Tanmay Gupta	Effect of Curvature on Seismic Response of Box Girder Bridge of Himachal	3rd international modern scientific research congress, May 06-08, 2022, Istanbul Gedik University, Istanbul, Turkey.	<a href="https://www.internationalistanbulcongress.com/en">https://www.internationalistanbulcongress.com/en</a>	
Dr Tanmay Gupta	Behavior of a Himachal bridge due to earthquake excitation	ISPEC 12th international conference on engineering and natural sciences, December 24-25, 2021, Bingol, Turkey.	<a href="https://www.ispeccongress.org/fenmuhendislik">https://www.ispeccongress.org/fenmuhendislik</a>	
Dr Tanmay Gupta	Influence of Skewness on Deflection response of horizontally curved RC box girder bridges	1st International Conference on Structures, Material and Construction (ICSMC2021) November 12-13, 2021, Jaypee University of Information Technology, Wagnaghat, Solan, India	<a href="http://www.juit.ac.in/ICSMC2021">www.juit.ac.in/ICSMC2021</a>	

Dr Tanmay Gupta	Air Quality assessment during festivities in Shimla City, India	1st International Conference on Structures, Material and Construction (ICSMC2021) November 12-13, 2021, Jaypee University of Information Technology, Wanknaghat, Solan, India	www.juit.ac.in/ICSMC2021	
Dr Tanmay Gupta	Assessment of Response Reduction Factor for Ordinary RC Frames by IS Code and PBPD Method	1st International Conference on Structures, Material and Construction (ICSMC2021) November 12-13, 2021, Jaypee University of Information Technology, Wanknaghat, Solan, India	www.juit.ac.in/ICSMC2021	

- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Dr Arpit Goyal	Assistant Professor, Thapar University	Pratyapan: Prospects of Higher Studies in Civil Engineering	23 <sup>rd</sup> October, 2021 (Online Mode)
M Prem	Consultant, KPMG	Orientation in Civil Department	5 <sup>th</sup> October, 2021 (Online Mode)
Sh Abdul Basit	Regional Officer, NHAI, Himachal Pradesh	Construction Methodology in Highway Projects	27 <sup>th</sup> May, 2022

- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Prof Ashish Kumar	Head of Department	Flow characteristics and Turbulence	6 <sup>th</sup> – 10 <sup>th</sup> December, 2021	Online Mode

		statistics in alluvial channels - ATAL Academy		
Dr Saurav	Assistant Professor (Senior Grade)	Construction aspects of RCC structures	8 <sup>th</sup> March, 2022	Online Mode
Dr Sugandha Singh	Assistant Professor (Senior Grade)	Seismic Vulnerability of Tall Buildings	7 <sup>th</sup> March, 2022	Online FDP by CV Raman Global University
Dr Saurabh Rawat	Assistant Professor (Senior Grade)	“Helical soil nails: A step forward in soil nailing technique’.	17 <sup>th</sup> July, 2021	one – day webinar organized by Department of Civil Engineering, Rajalakshmi Engineering College, Chennai
Mr Niraj Singh Parihar	Assistant Professor (Grade-II)	Improvement in conventional geotechnical facilities-Need of the hour	11 <sup>th</sup> September, 2021	IGS Forum
Mr Niraj Singh Parihar	Assistant Professor (Grade-II)	Industrial visits to underground tunnel and over bridges near Kandaghat with JUIT students	27 <sup>th</sup> May, 2022	Kandaghat (HP) via NHAI

- **Visits Organized**

Students of Third year, Fourth year and M-Tech Structure First year of Civil Engineering Department, JUIT, Waknaghat along with three faculty members visited NHAI's tunnel Construction Site at Kandaghat, Solan and Bridge Site No. 115, Kandaghat, Solan on 27<sup>th</sup> May 2022. 55 students, day scholars and hostellers alike assembled at 12:30 pm and left the campus in two university buses that were arranged for the occasion. The main reason behind this is to let students know things practically through interaction, working methods and employment practices. Moreover, it gives exposure from academic point of view. Main aim of the industrial visit is to provide an exposure to students about practical working environment. These visits also provide students a good opportunity to gain full awareness about industrial practices.

**Details of Industrial Visit are as below:**

Kandaghat Tunnel construction site and Bridge No. 115, Kandaghat, Solan, H.P.

- Date of Visit: 27<sup>th</sup> May 2022
- Under the Co-operation of: NHAI and Sushil Ahuja, Project Manager, AIREF
- Faculty during visit: Dr Sugandha Singh, Mr. Niraj Parihar, and Mr Kaushal Kumar
- No of Students: 55 [3rd Year - 21, 4th Year - 29 and M-Tech Structures – 05 of Department of Civil Engineering, JUIT Waknaghat

- **Recognition & Awards**

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
<b>Dr Saurabh Rawat</b>	Assistant Professor (Senior Grade)	IGS-Shri R.N. Prasad Biennial Award	18 <sup>th</sup> December, 2021	IGS-Shri R.N. Prasad Biennial Award to Pankaj Sharma, Saurabh Rawat and Ashok Kumar Gupta for paper entitled “Study and Remedy of Kotropi Landslide in Himachal Pradesh, India” published in Indian Geotechnical Journal as <i>best paper on “Slope Stability and Land Slides”</i> published through <i>Indian Geotechnical Society</i> , at Valedictory function of IGC-2021 organized online by IGS-Trichy Chapter.



- **Composition of Various Bodies**

- **Board of Studies (BOS) Members till 19<sup>th</sup> July, 2021**

Sr. No.	Name	Designation	Institution
1	Prof Ashish Kumar	Head of the Department, Civil Engineering	Jaypee University of Information Technology, Wagnaghat
2	Prof A.K. Gupta	Professor	Jaypee University of Information Technology, Wagnaghat
2	Prof S K Singh	Professor	PEC Chandigarh
3	Prof Samir Dev Gupta	Head of the Department, CSE/IT	Jaypee University of Information Technology, Wagnaghat
4	Dr Rajiv Kumar	Head of the Department, ECE	Jaypee University of Information Technology, Wagnaghat
5	Prof Karanjeet Singh	Head of the Department, Mathematics	Jaypee University of Information Technology, Wagnaghat
6	Prof Sudhir Kumar	Head of the Department, BT/BI	Jaypee University of Information Technology, Wagnaghat
7	Prof Anupriya Kaur	Head of the Department, HSS	Jaypee University of Information Technology
8	Dr Rajiv Ganguly	Associate Professor, CE	Jaypee University of Information Technology
9	Mr Yeshpal Vasishta	Executive Engineer	HPPWD
10	Ms Surabhi Sharma	Faculty, CE	Jawaharlal Nehru Government Engineering College, Sundernagar
11	Dr Saurabh Rawat	Assistant Professor, CE	Jaypee University of Information Technology

- **BOS Reframed Members w.e.f. 18<sup>th</sup> November, 2021**

Sr. No.	Name	Designation	Institution
1	Prof Ashish Kumar	Head of the Department, Civil Engineering	Jaypee University of Information Technology, Wagnaghat

2	Prof A.K. Gupta	Professor & Dean (Academics and Research)	Jaypee University of Information Technology, Waknaghat
2	Prof B.R. Gurjar	Professor	IIT Roorkee
3	Prof Arun Goel	Professor	NIT Kurukshetra
4	Dr Ashish Dhamaniya	Associate Professor	Sardar Vallabhbhai National Institute of Technology Surat, Gujarat
5	Er Kapil Dutt Sharma	Sr. Manager(Civil)/Executive Engineer	HPPCL Dadahu, District Sirmour (HP)
6	Mr Rijul Bajaj	Asst. Manager, PT&DIC	Larsen & Toubro Ltd, Delhi Regional office, Gurgaon, India
7	Prof Rajiv Ganguly	Professor, CE	Jaypee University of Information Technology, Waknaghat
8	Dr Saurabh Rawat	Assistant Professor, CE	Jaypee University of Information Technology, Waknaghat
9	Dr Saurav	Assistant Professor, CE	Jaypee University of Information Technology, Waknaghat
10	Dr Amardeep	Assistant Professor, CE	Jaypee University of Information Technology, Waknaghat
11	Prof Rajiv Kumar	Head of Department, ECE	Jaypee University of Information Technology, Waknaghat
12	Prof Vivek Sehgal	Head of Department, CSE &IT	Jaypee University of Information Technology, Waknaghat
13	Prof Sudhir Kumar	Head of Department, BT&BI	Jaypee University of Information Technology, Waknaghat
14	Prof P.B. Burman	Head of Department, PMS	Jaypee University of Information Technology, Waknaghat
15	Prof Karanjeet Singh	Head of the Department, Mathematics	Jaypee University of Information Technology, Waknaghat
16	Prof Anupriya Kaur	Head of the Department, HSS	Jaypee University of Information Technology, Waknaghat

• **List of Various Departmental Coordinators**

PhD Coordinator	Dr Rishi Rana
M Tech Coordinator	MTech EE: Dr Rajiv Ganguly MTech SE: Mr Chandra Pal Gautam MTech CM: Mr Rohan Singhal
M. Tech Seminar Coordinator	MTech EE: Dr Rajiv Ganguly MTech SE: Mr Chandra Pal Gautam MTech CM: Mr Rohan Singhal
B.Tech Coordinator	Mr Chandra Pal Gautam
B.Tech Project Coordinator	Dr Saurav
Placement Coordinator	Mr Kaushal Kumar
Department Club Coordinator	Mr Chandra Pal Gautam Mr Rohan Singhal
BOS Coordinator	Prof Rajiv Ganguly Dr Saurabh Rawat(Member)
NAAC Coordinator	Dr Arnav Anuj Kasar Mr Akash Bhardwaj (Member)
NBA Coordinator	Dr Arnav Anuj Kasar Mr Akash Bhardwaj (Member)
Library Coordinator	Mr Niraj Singh Parihar
Student Exchange Data Management Coordinator	Mr Rohan Singhal
Program Assessment and Quality Improvement Committee Coordinator	Prof Ashish Kumar (Coordinator) Prof Rajiv Ganguly (Co-coordinator) Prof A.K. Gupta (Member) Dr Tanmay Gupta (Member) Mr Chandra Pal Gautam (Member)
Virtual Lab	Dr Saurav
MOOC/SWAYAM courses Coordinator	Prof Rajiv Ganguly
Course Curriculum Evaluation Coordinator	Prof Rajiv Ganguly (Coordinator) Dr Tanmay Gupta (Member) Mr Chandra Pal Gautam (Member)
Academically Weak Students Committee	Mr Akhilesh Gandhi
Consultative Committee	Prof Rajiv Ganguly
Website Maintenance Coordinator	Mr Rohan Singhal

Lab In charge	<ul style="list-style-type: none"> <li>▪ Highway Engineering Lab: <b>Dr Amardeep</b></li> <li>▪ Environmental Engineering &amp; Chemistry Lab: <b>Prof Rajiv Ganguly</b></li> <li>▪ Concrete Technology Lab: <b>Dr Saurav</b></li> <li>▪ Geotechnical Engineering Lab: <b>Mr Niraj Singh Parihar</b></li> <li>▪ Workshop Practices: <b>Mr Kaushal Kumar</b></li> <li>▪ Engineering Graphics Lab: <b>Mr Chandra Pal Gautam</b></li> <li>▪ Surveying Lab: <b>Mr Akhilesh Gandhi</b></li> <li>▪ Geology Lab: <b>Mr Niraj Singh Parihar</b></li> <li>▪ Civil Engineering Software Lab: <b>Mr Chandra Pal Gautam</b></li> <li>▪ Structural Mechanics Lab: <b>Mr Chandra Pal Gautam</b></li> <li>▪ Fluid Mechanics Lab: <b>Mr Akash Bharwaj</b></li> <li>▪ Fluvial Hydraulics Lab: <b>Mr Akash Bharwaj</b></li> <li>▪ Computational Research Lab: <b>Mr Chandra Pal Gautam</b></li> </ul>
Research Publications, Patents and IPR	Prof Rajiv Ganguly
Attendance Review Coordinator	Mr Akash Bhardwaj
Feedback of Students Coordinator	Dr Amardeep
Mentoring Coordinator	Mr Akhilesh Gandhi
Expert lecture/ Workshop organized/ Seminar data collection Coordinator	Dr Sugandha Singh Mr Akash Bhardwaj (Member)
Course Files/Lab files Coordinator	Mr Niraj Singh Parihar
Faculty Project proposal I/C	Prof Rajiv Ganguly
Hilly Ramblings Coordinator	Dr Rishi Rana
Result Coordinator	Prof Ashish Kumar
Finance Coordinator	Mr Niraj Singh Parihar
M-Tech Load Distribution	Mr Chandra Pal Gautam
M-Tech/ PhD Stipend Coordinator	Mr Chandra Pal Gautam
Member Secretary (Departmental Affairs)	Mr Chandra Pal Gautam
Gender Champion (UGC Program)	Mr Niraj Singh Parihar & Prof Ashish Kumar
Stock Verification	Mr Niraj Singh Parihar
Data from Final year (GATE, Exit Survey, Foreign university admission etc)	Mr Rohan Singhal

Database of Visitors	Mr Chandra Pal Gautam
PhD Examiner Database	Dr Rishi Rana
Project Monitoring Committee	Prof Rajiv Ganguly
Mock Interviews	Dr Sugandha Singh (Coordinator) Dr Arnav Anuj Kasar (Member) Mr Kaushal Kumar (Member)
Course Curriculum Revision Committee	Prof Rajiv Ganguly (Coordinator) Dr Tanmay Gupta (Member) Mr Chandra Pal Gautam (Member)
List of Department Faculty and Biodata	Mr Chandra Pal Gautam
Industrial Training Relation Officer	Mr Kaushal Kumar
Department Annual Report Coordinator	Prof Ashish Kumar Dr Rishi Rana
Research Lab Coordinator	Prof Rajiv Ganguly
Departmental Quality Assurance Committee	Prof Ashish Kumar (Coordinator) Prof Rajiv Ganguly (Co-coordinator) Prof A.K. Gupta (Member) Dr Tanmay Gupta (Member) Mr Chandra Pal Gautam (Member)
Summer Training Coordinator	Mr Kaushal Kumar
Outreach Activities Coordinator	Mr Rohan Singhal
Store Management Committee	Mr Niraj Singh Parihar
Purchase Committee	Mr Niraj Singh Parihar

### **Civil Engineering Department- Consultative Committee**

Prof Ashish Kumar, Chairman  
 Prof Ashok Kumar Gupta, Member  
 Prof Rajiv Ganguly, Member  
 Mr Chandra Pal Gautam, Member  
 Mr Nishant, Representative BTech Ist year Civil Engineering  
 Mr Prateek Sharma, Representative BTech IIInd year Civil Engineering  
 Mr Ujjwal Tyagi, Representative BTech IIIrd year Civil Engineering  
 Mr Ritik Kumar Puri, Representative BTech IVth year Civil Engineering  
 Ms Diksha Kumari, Representative MTech students of Civil Engineering  
 Ms Prachi Vasistha, Representative PhD scholars of Civil Engineering

## **DEPARTMENT OF PHYSICS & MATERIALS SCIENCE**

### • **Vision**

The Department ideates: “Student centered learning and student-faculty research by using a mixture of traditional, current and integrative pedagogical techniques dictated by state of the art education & research in order to create a nationally & internationally recognized unique model for physics and materials science education in both public and professional spheres.” Specifically:

- To provide end-oriented education & striving for excellence in performance-based teaching and research in order to maintain high levels of professionalism and integrity.
- To be internationally and nationally recognized for teaching and research.
- To be recognized and appreciated for different courses in order to contribute in shaping successful engineering graduates.
- Implementing fundamental physics & applications to integrate the research and innovative teaching for motivating students to be better intellectuals.

### • **Mission**

- To promote outcome based education to prepare students for variegated challenges in industry and academia.
- To provide a panorama of courses imparting teaching, research and mentoring opportunities for graduate students.
- The department is dedicated to provide teaching and encourage
- Collaborative learning in Physics & Materials Science in a performance based active academic environment.

### • **Faculty Details**

<b><u>S.No.</u></b>	<b><u>Name</u></b>	<b><u>Qualification</u></b>	<b><u>Specialization</u></b>
1.	Prof (Dr) P B Barman	PhD	II-V compound semiconductors
2.	Prof (Dr) Sunil K. Khah	PhD	Microstrip Antennas
3.	Prof. (Dr.) Vineet Sharma	PhD	Amorphous Semiconductors
4.	Dr. S K Hazra	PhD	Gas Sensors
5.	Dr. R R Singh	PhD	Core-shell nanostructures
6.	Dr. S K Tiwari	PhD	Optical & Magnetic studies/ZnO
7.	Dr. Santu Baidya	PhD	Computational Physics

### • **Programs**

#### • **Undergraduate Program**

Department of Physics and Materials Science offers the following courses to various undergraduate programmes:

- **Core**

S No	Title of Course	Course Code
1	Engineering Physics - I	18B11PH111
2	Engineering Physics Lab - I	18B17PH171
3	Basic Engineering Physics - I	18B11PH112
4	Basic Engineering Physics Lab - I	18B17PH172
5	Engineering Physics - II	18B11PH211
6	Engineering Physics Lab - II	18B17PH271
7	Bio-Instrumentation Techniques	18B11PH212
8	Science & Technology of Materials	18B1WPH531
9	Applied Mat. Science	18B1WPH532

- **Elective**

S No	Title of Course	Course Code
1	Nanotechnology	18B1WPH731
2	Optical Fiber Network Design	18B1WPH732
3	Optoelectronic Devices	18B1WPH831

- **PhD Program**

The award of the PhD degree is in recognition of high academic achievements demonstrated by independent research and application of knowledge to the solution of technical and scientific problems. Creative and productive inquiry is the basic requirement underlying research work. The academic program leading to the degree involves fulfilling course credit requirements, residential requirements and a thesis giving a critical account of the research carried out, in any of the areas listed below. Nano-structured semi-conducting thin films, electro-luminescent display devices, magnetic multi-layered thin films, ferrite based micro-strip antennas, opto-electronic materials, semi-conducting materials for microelectronic devices.

- **Laboratory Facilities**

- **Laboratory Staff with Qualification**

Name	Designation	Qualification
Kamlesh Kr Mishra	Sr. Lab Engineer	MTech.
Ravendra Kr Tiwari	Lab Technician	BSc (PCM)
Ghanshyam	Lab Assistant	Diploma in Electronics

- **Laboratories with major equipments**

- Material Science Laboratory

The Materials Science laboratory is equipped with

- Thermal/E-Beam Vapour deposition unit

- Hydraulic press
- High temperature two probe set-up with TPX-600°C PID controller, 1500 V EHT power supply, high resolution picoammeter, and Dielectric constant measurement setup.

- CVD Laboratory

CVD laboratory is equipped with

- Microprocessor controlled furnace used for annealing thin films upto 1400°C in presence of specific gases such as argon, nitrogen etc. Also it is used to prepare carbon nanotubes (CNT).
- Specially designed chamber to synthesize thin films in the presence of magnetic field by using vapour technique.

- Nanotechnology Laboratory

The nanotechnology laboratory is well equipped with

- Muffle furnace
- Hot air oven
- Spin coating unit
- Single pan highly sophisticated balance
- Magnetic stirrers

- Characterization Laboratory

Characterization laboratory is equipped with various characterization techniques:

- Perkin Elmer Lambda 750 UV-visible-NIR spectrophotometer having range 190-3300 nm
- LS-55 spectrophotometer (Perkin Elmer) to record photoluminescence spectra in the range of 200-900 nm.
- STM
- Keithley's Picoammeter and gas sensor setup.

- EM Analysis Laboratory

The electromagnetic analysis laboratory is equipped with adequate software and hardware facilities. The laboratory has antenna design softwares like

- HFSS
- IE3D
- EMPIRE EXCEL

Also, the laboratory has the facility for fabrication and analysis of antenna by using

- PCB Design Machine



- Vector Network Analyzer
- 2D growth Laboratory

2-dimensional (2-D) growth laboratory is equipped with

- Advanced Chemical vapour deposition unit for thin film fabrication which provides an option to grow materials in low pressure and atmospheric pressure.
- **Specially designed chamber** for testing hydrogen gas storage in materials.

• **Research Projects Sanctioned during the Academic Year/In Progress: Nil**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status

• **Conferences, Seminars and Workshops/Faculty development program**

• **Conferences**

• **Conferences Organized :02**

• **Conferences Attended : 00**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
November 24 & 25, 2021	International conference on "Technological Intervention in Renewable Energy for Sustainable Environment (RESE-2021)"	JUIT	Ragini Raj Singh	Member Organizing committee (Technical)
October, 07-09, 2021	6th International Conference on signal processing, computing and control (ISPCC-2021)	JUIT	Ragini Raj Singh	Session Chair

- **Seminars**

- **Seminars Organized :06**

- **Seminars Attended : Nil**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
September, 11 <sup>th</sup> , 2021	International Webinar Series (IWS) entitled "AI platform to catalog unconventional stress proteins for deep exploration of space" by Dr. Ankush Bansal, Centre for Neuroscience Research, Children's National Hospital, Washington DC, USA on.	CEHTI, JUIT	Ragini Raj Singh	Coordinator
October, 9 <sup>th</sup> , 2021	International Webinar Series (IWS) entitled "Research Data Management and FAIR Principles for Healthcare Data" on Research and Technological Advancements in Bioinformatics" by Dr. Gurnoor Singh, Center for Molecular and Biomolecular Informatics, Radboud UMC, Nijmegen, Netherlands	CEHTI, JUIT	Ragini Raj Singh	Coordinator
November, 20 <sup>th</sup> , 2021.	International Webinar Series (IWS) entitled "FuSe: A tool for functional analysis of RNA-Seq data" by Dr. Rajinder Gupta, Emmy Noether Group for Computational Microbiome Research, Technical University of Munich, Germany	CEHTI, JUIT	Ragini Raj Singh	Coordinator
December, 18 <sup>th</sup> , 2021	International Webinar Series (IWS) entitled "Containersation & Dev Ops Practices for Bioinformaticians" by Mr. Satyam Kapoor, Cloud Infrastructure Engineer, and Sitecore, Belgium on.	CEHTI, JUIT	Ragini Raj Singh	Coordinator
February, 28, 2022	National Science Day Symposium (NSDS-2022)	JUIT	Ragini Raj Singh	Coordinator

December 22, 2021	National Mathematics Day (NMD-2021): Virtual symposium entitled 'National Mathematics Day (NMD-2021)' in association with Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE), Government of Himachal Pradesh India	JUIT	Ragini Raj Singh	Coordinator
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- **Workshops**

- **Workshops Organized :02**

- **Workshops Attended :04**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
January, 5th & 6th, 2022	"National Level Workshop on NIRF INDIA RANKINGS - 2022 For Higher Educational Institutions" held in Online	Institute for Academic Excellence in collaboration with Collegiate Education & Technical Education Department, Govt. of Telangana.	P.B. Barman, Professor, Physics and Materials Science, Jaypee University of Information Technology	Attended
June, 17-23, 2022	DST and DBT sponsored STBMS-2022, a national workshop on statistical techniques for biological and medical sciences	CEHTI, JUIT	Ragini Raj Singh	Organizing committee member as moderator and fundraiser
September, 14, 2021	Workshop on attracting grant and funds for research	Wiley	Ragini Raj Singh	Attended
March-September 2021	Arogaya CIBioD Short Term Attachment	Center for Innovation and	Ragini Raj Singh	Member Organizing committee

	Programme	Bio-Design,  PGIMER, Chandigarh, India		from CEHTI, JUIT
January, 10-11, 2022	Online teaching and Evaluation	NITTTR, Chennai	Ragini Raj Singh	Attended. FDP
February, 21-26, 2022	ONLINE WORKSHOP ON NAAC	Jharkhand Govt Tool Room, Ranchi	Sunil Kumar Khah	Attended

• **Publications**

• **Journal Publications=14**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Surajit Kumar Hazra, P Barman	Hydrogen response of palladium nanoparticles washed with different solvents	Bulletin of Materials Science	44(1) (2021) 1-7	
Vineet Sharma	Improvement in thermal stability and crystallization mechanism of SM doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films for phase change memory applications	Journal of Alloys and Compounds	893 (2022) 162316 (1-12)	3
Vineet Sharma	Optical and mechanical properties of Ag doped thermally evaporated SeTe thin films for optoelectronic applications	Journal of Physics and Chemistry of Solids	159 (2021) pp. 110291 (1-10)	4
Vineet Sharma	Structural transition on doping rare earth Sm to Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase change material	Journal of Alloys and Compounds	877 (2021)pp. 160246(1-9)	2
P.B. Barman	On the structural and optical aspects of GeTeSeGa thermally evaporated chalcogenides thin films for infrared applications	The European Physical Journal Plus	137, 358 (2022), pp.1-12	
P. B. Barman & Ragini Raj Singh	Experimental and Theoretical verification of cation distribution and spin canting effect via structural	Journal of the Australian Ceramic Society	58 (2022) 101–111	1

	and magnetic studies of NiZnCo ferrite nanoparticles			
P B Barman, Ragini Raj Singh	Estimation and association of structural, elastic and magnetic properties of magnesium-nickel-ferrite nanoparticles annealed at different temperatures	Materials Science and Engineering: B	272 (2021) 115362	1
Sunil Kumar Khah	Numerical model & design of wideband band reject filter with closed loop rectangular resonator	International Journal of Electronics Letters	(2022)	
Ragini Raj Singh	Optical Properties of ZnS Quantum Dots: Applications in Solar cells and Biomedicine	Biointerface Research in Applied Chemistry	158 (2022)	
Ragini Raj Singh	Development of High Coercivity/High Fluorescence Hybrid nanostructures	Letters in Applied NanoBioScience	12 (2022) 48	
Ragini Raj Singh	Phytochemically stabilized chitosan encapsulated Cu and Ag nanocomposites to remove cefuroxime axetil and pathogens from the environment	International Journal of Biological Macromolecules	212 (2022) 451-458	
Ragini Raj Singh	Unmediated one-step synthesis of novel ZnSO for photovoltaic and electronic applications	Materials Letters	324 (2022) 132651	
S K Tiwari	Zero-field magnetic resonance of cobalt ion pairs in ZnO nanocrystals	Phys. Rev. B	105 (2022) 035424	
Rajesh Kumar	Evolution of a facile and novel general strategy for fabricating single and mixed 3d-block transition metal hydroxide/oxide films for innumerable applications	Materials Chemistry and Physics	266 (2021) 124534	

- Books/Book Chapters Published:**

<b>Name of Faculty</b>	<b>Title of Chapter</b>	<b>Name of Book</b>	<b>Reference</b>	<b>Citation</b>
Vineet Sharma	Ferrite Materials for Microwave and High Frequency Antenna Applications, pp 107–115	Ferrites and Multiferroics: Engineering Materials Book Series	Bhargava, G.K., Bhardwaj, S., Singh, M., Batoo, K.M. (eds). Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-7454-9_6">https://doi.org/10.1007/978-981-16-7454-9_6</a> Print ISBN978-981-16-7453-2	--
Ragini Singh	Synthesis and Functionalization of Magnetic and Semiconducting Nanoparticles for Catalysis, Pp 261-302	Functionalized Nanomaterials for Catalytic Application	Chaudhery Mustansar Hussain, Sudheesh K. Shukla, Bindu Mangla (EDs), John Wiley & Sons, Inc., © 2021 Scrivener Publishing <a href="https://doi.org/10.1002/9781119809036.ch10">https://doi.org/10.1002/9781119809036.ch10</a> Print ISBN:9781119808978  Online ISBN:9781119809036	--

- Conference Publications**

<b>Name of Faculty</b>	<b>Title of Article presented</b>	<b>Name of conference</b>	<b>Reference</b>	<b>Dates</b>
Surajit Kumar Hazra, P B Barman	Hydrothermal synthesis of mono/bi-metallic nano-particles	AIP Conference Proceeding	2352 (2021) 40011	
Surajit Kumar Hazra, P B Barman	Optimization of molybdenum-disulfide nano-morphology by hydrothermal	AIP Conference Proceeding	2352 (2021) 40010	

	technique			
Sanjiv Kumar Tiwari, P.B. Barman	Morphological transition of the ZnO hexagonal nanowires to cylindrical nanowires	DAE Solid State Physics Symposium	(2021)	December 15 - 19, 2021
Sunil Kumar Khah	A Frequency Reconfigurable X- shaped Antenna for WiMAX/ WLAN Band	IEEE, International Conference for Advancement in Technology (ICONAT)	(2022) 1-4	January 21 & 22, 2022

- Guest Speakers/Lectures/ Visits**

- Guest Speakers: Nil**

- Lectures Delivered by Faculty :**

1. Shapes effect on hydrogen response of palladium nanoparticles, Webinar on 11-01-2022, School of Basic and Applied Sciences, IEC University, Baddi, HP
2. Magnetic materials-I, 19-04-2022, Short term course on Refresher Course in Engineering Materials Science, NITTTR Chandigarh
3. Magnetic materials-II, 19-04-2022, Short term course on Refresher Course in Engineering materials Science, NITTTR Chandigarh

- Visits Organized=Nil**

Institution visited	Dates	Aim of visit	Participation	
			Students	Faculty

- Recognition & Awards**

- By Faculty : Nil**

- Students : Nil**

- Composition of Various Bodies**

- Board of Studies (BOS)**

Ser No	Name	Designation	Institution
1.	P B Barman	Professor	JUIT

2.	Sunil K Khah	Professor	JUIT
3.	Vineet Sharma	Professor	JUIT
4.	Ragini Raj Singh	Associate Professor	JUIT
5.	Surajit K Hazra	Associate Professor	JUIT
6.	Sanjiv Tiwari	Asstt. Prof (SG)	JUIT
7.	Karanjeet Singh	Professor	JUIT
8.	Ashok K Gupta	Professor	JUIT
9.	Sushi Seal	Professor	JUIT
10.	Rajiv Kumar	Professor	JUIT
11.	D K Ray	Professor	JILT, Naiad
12.	Anil Vera	Professor	K U Kurkshetra



## **DEPARTMENT OF MATHEMATICS**

### **Vision:**

- To produce leaders in technology with excellent analytical skills through mathematics education at global level and training the students in acquiring conceptual understanding of the framework and structure of mathematics, its logical, cognitive and operational processes, and applications.

### **Mission:**

- M1. To provide an environment to students where they can learn and be competent users of mathematics and its applications
- M2. To strive by introducing the students to main ideas and methods of Mathematics for building up their reasoning and analytical skills.
- M3. To provide quality Mathematics education to enhance the capability and competence in assimilating, dissecting and distilling information for engineering and technology applications.

### • **Faculty Details**

<b>S.No.</b>	<b>Name</b>	<b>Qualification</b>	<b>Specialization</b>
1.	Prof. Rakesh K. Bajaj	PhD	Fuzzy Information Measures& Decision Making
2.	Prof. Karanjeet Singh	PhD	Nonlinear Differential Equations
3.	Dr R S Raja Durai	PhD	Algebraic Coding Theory
4.	Dr Neel Kanth	PhD	Mathematical Modeling
5.	Dr Pradeep Kumar Pandey	PhD	Differential Geometry
6.	Dr Saurabh Srivastava	PhD	Nonlinear Programming (Operations Research)
7.	Dr Mandeep Singh	PhD	Nonlinear Boundary Value Problems
8.	Dr Bhupendra Kumar Pathak	PhD	Evolutionary Computation Methods, Soft Computing Techniques & Machine Learning.

- **PhD Program**

Departmental research interests are in applied group theoretic techniques, discrete symmetries, mathematical modeling and simulation, non-linear partial differential equations, linear algebra, numerical methods, operations research, differential geometry, wavelets and differential equations, Algebraic Coding Theory , sequence design, distributed source coding, fuzzy information measures, decision making, pattern recognition, Nonlinear Programming (Operations Research), Statistical Inference, Sampling, Applied Statistics, and Soft Computing Techniques.

The Department of Mathematics was established from the very inception of the University mainly to cater the needs of BTech programs. The Department is well equipped with software like MATLAB, SPSS, Lingo and Lindo.

- **Research Projects Sanctioned during the Academic Year/In Progress** -Nil

- **Conferences**

- **Conferences Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>No. of participants</u></b>	<b><u>Remarks</u></b>
Dec 21-22, 2021	FIAM-2021	SLIET Longowal	150	Contributed as Convener

- **Conferences Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
Oct 26-28, 2021	International conference on "Recent advances in Differential geometry and Topology".	CUP Bathinda, Punjab	Pradeep Kumar Pandey	Online
Sep 06-10, 2021	Recent Developments in Mathematics, Optimization and Computational Sciences (RDMOCS 2021)	Department of Mathematical Sciences and Computer Applications, Bundelkhand University, Jhansi (Uttar Pradesh)	Dr. Saurabh Srivastava	

- **Seminars**

- **Seminars Organized**

28-Feb-2022	Co-conveners National Science Day Symposium (NSDS-2022).	Jaypee University of Information Technology (JUIT) in association with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE), Govt. of H. P.	Dr. Bhupendra Kumar Pathak	140
22-Dec-2021	Event Co-coordinators of National Mathematics Day	Jaypee University of Information Technology (JUIT) in association with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE), Govt. of H. P.	Dr. Bhupendra Kumar Pathak	150

- **Seminars Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
Aug 21, 2021	Webinar on National Pension System	NSDL, & Dept of Civil Engineering, JUIT	Pradeep Kumar Pandey	Online
Feb 10, 2022	International webinar on "Applications of Differential Geometry"	MMU, Mullana, Haryana	Pradeep Kumar Pandey	Online

- Workshops Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
Sep 04-05, 2021	Workshop on Vedic Mathematics	Department of Mathematical Sciences and Computer Applications, Bundelkhand University, Jhansi (Uttar Pradesh)	Dr. Saurabh Srivastava	Online
Aug 02-06, 2021	Futuristic Trends in Energy, Material and Manufacturing Technology	Hindustan College of Science & Technology, Mathura, U.P.	Dr. Mandeep Singh, Dr. Saurabh Srivastava	Online

- Workshops Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>No of participants</u></b>
June 17-23, 2022	STBMS-2022	JUIT Waknaghat	Dr. Neel Kanth, Dr. Saurabh Srivastava	30

- Publications**

- Journal Publications**

<b>Name of Faculty</b>	<b>Title of Article</b>	<b>Name of Journal</b>	<b>Reference</b>	<b>Citation</b>
Rakesh Bajaj & Abhishek Guleria	T-spherical Fuzzy Soft Matrices with Applications in Decision Making and Selection Process	Scientia Iranica - Transactions on Industrial Engineering	10.24200/SCI.2021.55856.4440	SCIE/Scopus
Rakesh Bajaj Mahima Poonia	On Laplacian Energy of Picture Fuzzy Graphs in Decision Making and Site Selection Problem	Journal of Intelligent and Fuzzy Systems,	Vol. 41 (1), pp. 481-498, Aug 2021, 10.3233/JIFS-202131.	SCIE/Scopus

Rakesh Bajaj & Abhishek Guleria	K	On Some New Statistical Correlation Measures for T-spherical Fuzzy Sets and Applications in Soft Computing	Journal of Information Science and Engineering,	Vol. 37, No. 2, pp. 323–336, 2021.	SCIE/Scopus
Rakesh Bajaj & Mahima Poonia	K	Complex Neutrosophic Matrix with Some Algebraic Operations and Matrix Norm Convergence	Neutrosophic Sets and Systems	47, pp-165-178, 2022.	ESCI/Scopus
Rakesh Bajaj & Mahima Poonia	K	Utility Distribution Based Measures of Probabilistic Single Valued Neutrosophic Information, Hybrid Ambiguity & Information Improvement	Communications in Computer and Information Science (Springer),	Vol 1572, pp-78-89, 2022	Scopus
Swati, Mandeep Singh and Karanjeet Singh		An Advancement Approach of Haar Wavelet Method and Bratu-Type Equations	Applied Numerical Mathematics	70 (2021) 74-82.	SCI
Swati, Karanjeet Singh and Mandeep Singh		Uniform Haar Wavelet Technique with Newton's Method for a kind of Derivative Dependent SBVPs	Journal of Mathematical Chemistry	vol. 59 (2021) 1610-1637	SCI
Preeti Devi and K. Singh		Classical Lie Symmetries and Similarity Reductions of the (2+1) Dimensional Dispersive Long Wave System	Asian-European Journal of Mathematics	14(4), 2150052 (2021)	SCOPUS
P. Devi and K. Singh		Lie symmetry analysis of the nonlinear Schrödinger equation with time dependent variable coefficients	International Journal of Applied and Computational Mathematics	vol.7(23), 2021	SCOPUS

Mahima Poonia and K. Singh	Exact Solutions of Nonlinear Dynamics of Microtubules Equation Using the Methods of First Integral and Expansion.	Asian European Journal of Mathematics	<a href="https://doi.org/10.1142/S1793557123500079">https://doi.org/10.1142/S1793557123500079</a> (2022)	SCOPUS
R S Raja Durai, Meenakshi Devi, Ashwini Kumar	Multiple-rate error-correcting coding scheme	Applicable Algebra in Engineering, Communication and Computing (AAECC)	vol. 33, pp. 117-134, 2022. DOI: <a href="https://doi.org/10.1007/s00200-020-00435-x">doi.org/10.1007/s00200-020-00435-x</a>	SCI/SCIE & SCOPUS
Neelam Gupta, Neel Kanth	A comparative Study of New Homotopy Perturbation Method and Finite Difference method for Solving Unsteady Heat Conduction equation	Journal of the Serbian Society of Computational Mechanics	Vol15(1),pp.9 8-109,ISSNNo: 1820-6530(print), 2620-1941(online)	ESCI & SCOPUS
Sameer, Pradeep Kumar Pandey	On the adapted connections on Kaehler-Norden silver manifolds	Honam Mathematical Journal	vol. 43, no. 4, pp. 701–715, (2021)	SCOPUS
Shaveta Kumari, Saurabh Srivastava	On optimality conditions for interval optimisation problems using generalised Hukuhara difference and constrained interval arithmetic	International Journal of Mathematics in Operational Research	vol. 19, no. 2, 204-219, (2021). DOI: <a href="https://doi.org/10.1504/IJMOR.2021.116315">doi/abs/10.1504/IJMOR.2021.116315</a>	SCOPUS
Saurabh Srivastava	An inventory model for perishables with fixed storage life and diminishing ability to buy in their life expectancy.	<i>International Journal of Operational Research</i>	DOI: 10.1504/IJOR.2021.10040828	SCOPUS
Mandeep Singh, Nazia Urus, Amit K. Verma	A different monotone iterative technique for a class of nonlinear three-point BVPs	Computational and Applied Mathematics (Springer)	Volume 40, 262 (2021)	SCIE
Jyoti, Mandeep Singh	An iterative technique based on HPM for a class of one dimensional Bratu's type problem	Mathematics and Computers in Simulation	Volume 200, Pages 50-64 (2022).	SCI

• **Books/Book Chapters Published**

<b>Name of Faculty</b>	<b>Title of Article</b>	<b>Name of Book</b>	<b>Reference</b>	<b>Citation</b>
Rakesh Bajaj	K Spherical Fuzzy Information and Graphs with Soft Computing Applications	Spherical Fuzzy Information and Graphs with Soft Computing Applications	Narosa Publishing House Pvt. Ltd., New Delhi, 2021. ISBN: 978-81-8487-720-5.	
Rakesh Bajaj	K Utility Distribution Based Measures of Probabilistic Single Valued Neutrosophic Information, Hybrid Ambiguity & Information Improvement	Communications in Computer and Information Science (Springer),	Vol 1572, pp-78-89, 2022	
Neelam Gupta, Neel Kanth	Application of Perturbation Theory in Heat Flowanalysis	A Collection of Papers on Chaos Theory and Its Application	Chapter9(12p ages), edited by Paul Bracken and Dimo Uzunov, Intechopen, ISBN:978-1-83962-875-7	Web of Science
Shaveta Kumari, Saurabh Srivastava	A Newton Based Optimization Method For Interval Multi-objective Optimization Problems (IMOP) Using GH-Calculus	Advances and Applications in Mathematical Sciences	(pp.30-39). Mili Publications, Allahabad: [ISBN: 978-93-90146-22-2]	

- Conference Publications**

<b>Name of Faculty</b>	<b>Title of Article</b>	<b>Name of Conference</b>	<b>Reference</b>	<b>Citation</b>
R S Raja Durai, Ashwini Kumar	Application of T-Direct codes in Multiple rate Codes	7th International Conference on Mathematics and Computing (ICMC21)	Advances in Intelligent Systems and Computing (AISC), vol. 1412, pp. 673-687, 2022  URL: <a href="https://link.springer.com/book/9789811668913">https://link.springer.com/book/9789811668913</a>	Scopus
Shaveta Kumari, <u>Saurabh Srivastava</u>	A Sequential Algorithm to Solve gH-Differentiable Interval Optimization Problems	IC3 '21: 2021 Thirteenth International Conference on Contemporary Computing, Noida, India, August 5 - 7, 2021	August 2021 Pages 57–62 <a href="https://doi.org/10.1145/3474124.3474132">https://doi.org/10.1145/3474124.3474132</a>	ACM

- Guest Lectures**

<b>Name of Faculty</b>	<b>Designation of Faculty</b>	<b>Topic of Lecture</b>	<b>Date</b>	<b>Venue</b>
Prof Rakesh K Bajaj	Professor and Head	Thoughts and Dots – Beauty of Mathematics – in light with NEP 2020	May 27, 2022	IGNOU, New Delhi



- Lectures Delivered by Faculty**

<b>Name of Faculty</b>	<b>Designation of Faculty</b>	<b>Topic of Lecture</b>	<b>Date</b>	<b>Venue</b>
Dr. Bhupendra Kumar Pathak	Asst. Prof. (SG)	Genetic Algorithm for Multi-Objective Optimization Problems	22-Dec-2021	International Conference on “Recent Trends of Teaching and research in Applied Science & engineering (ICASE-2020), organized by department of applied science and humanities, RBS Engineering Technical Campus, Bichpuri, Agra, Uttar Pradesh, India.
Dr. Bhupendra Kumar Pathak	Asst. Prof. (SG)	Basics of probability	04 and 6th Dec-2021	Department of Microbiology, School of Interdisciplinary and Applied Sciences (SIAL), Central University of Haryana, Mahendergarh, Haryana, India.
Dr. Bhupendra Kumar Pathak	Asst. Prof. (SG)	Basics of probability and random Variables.	June 17-23, 2022	Moderator and Speaker, Workshop on Statistical Techniques in Biological and Medical Sciences (STBMS-2022), Department of Mathematics jointly with Centre of Excellence in Healthcare Technologies and Informatics (CEHTI), Department of Biotechnology and Bioinformatics.
Dr. Saurabh Srivastava	Asst. Professor (SG)	Parametric Tests in Statistics	June 22, 2022	JUIT, Wagnaghat
Dr. Saurabh Srivastava	Asst. Professor (SG)	Non-parametric Tests in Statistics	June 23, 2022	JUIT, Wagnaghat

- **Composition of Various Bodies**

- **Board of Studies (BoS)**

<b>S No</b>	<b>Name</b>	<b>Designation</b>	<b>Institution</b>
1.	Prof. Rakesh Kumar Bajaj	Professor & HoD (Maths)	JUIT
2.	Prof. Karanjeet Singh	Professor of Maths	JUIT
3.	D. R S Raja Durai	Associate Prof. of Maths	JUIT
4.	Dr Bhupendra K Pathak	Assistant Prof. of Maths	JUIT
5.	Dr Surajit Kumar Hazra	Associate Prof. of Physics	JUIT
6.	Prof P. B. Barman	Prof. & HoD PMS	JUIT
7.	Prof Sudhir Syal	Prof. and HoD BT/BI	JUIT
8.	Prof Ashish Kumar	Prof. & HoD CE	JUIT
9.	Prof Vivek Sehgal	Prof. & HoD CSE&IT	JUIT
10.	Prof Rajiv Kumar	Prof & HoD ECE	JUIT
11.	Dr. Amit Srivastava	Associate Prof. & HoD, HSS	JUIT
12.	Prof. B S Panda	Professor Maths	IIT Delhi
13.	Prof. M K Sharma	Prof. & HoD Maths	TIET Patiala
14.	Dr. Gaurav Mittal	Scientist	DRDO Delhi
15.	Mr. Abhinav Anand	SRQ Researcher	NatWest Markets London, UK

## **DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES**

### **Department Vision and Mission**

- **Vision**

To be the change-facilitators by imparting professional and behavioral competencies to complement the existing and emerging educational programs of the University and match the Industry Requirements.

- **Mission**

M1: To facilitate students and professionals to become Innovative, Competitive and Enterprising in their chosen fields.

M2: To create responsible global citizens, who are able to express and assess opinions, take independent decisions and value the power of imagination and continuous learning.

M3: To bridge the gap between academia and industry by incorporating contemporary concepts and practices in our courses.

- **Faculty Details**

<b><u>Faculty Name</u></b>	<b><u>Qualification</u></b>	<b><u>Specialization</u></b>
Dr. AnupriyaKaur	PhD	Marketing
Dr. Amit Srivastava	PhD	Finance and International Business
Dr. Tanu Sharma	PhD	HRM
Ms. Triambica Gautam	MBA	Banking and Finance
Dr. Papiya Lahiri	PhD	Commonwealth Literature, British and Canadian Drama, Gender Studies
Dr. Neena Jindal	PhD	Good Governance, Human rights
Dr. Deler Singh	PhD	Professional Communication Skills and Literature in English

- **New Courses introduced during the year**

<b><u>S No</u></b>	<b><u>Title of New Course</u></b>	<b><u>Course Code</u></b>
1	The Indian Constitution	18B11HS711
2	Life Skills and Effective Communication	21B11HS211
3	Life Skills and Effective Communication Lab	
4	Presentation and Communication Practices	21B11HS311

- **PhD Program**

The Department of Humanities and Social Sciences strives to nurture young minds to become well-rounded engineers, responsible global citizens and leaders. The Department acts as change-facilitator by imparting professional and behavioral competencies to complement the existing and emerging educational programs of the University. We have multifaceted faculty in the department who offer a variety of contemporary courses to students at undergraduate and post graduate level. Additionally, the faculty has been vigorous in conducting FDP programs, community development programs and workshops based on research methods. Faculty in the department has been actively pursuing and guiding research in the areas of marketing management, finance and econometrics, business communication and human resource management with research publications in journals of high repute

- **Research Specializations:** Consumer Behavior, Service Marketing, Internet Marketing,

- **Lab Facilities**

**Equipments**

1. Dell Computer-D19M-Intel Core i5-7400-7<sup>th</sup> Gen@3.00Ghz, RAM-8Gb, HDD-1TB  
Windows 10 Pro (25)
2. Headphones (30)

**Operational Softwares**

1. Snet 8.0 Client, Business Writing, Tense Buster (Port 1-30)
2. Snet 8.0 Master, Business Writing, Tense Buster (1)
3. IBM SPSS Statistics 24 (Port 2,3,4)
4. Cyber client, office 2007

- **Lab Staff with Qualification**

Name	Designation	Qualification
Mr Mahinder	Junior lab Assistant	MCA

- **Conferences Organized – NIL**

- **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
28-30 March	IFC 2022	Online	Dr. Amit Srivastava	

11-13 February, 2022	DELCON 2022	Online	Triambica Gautam	
11-13 February, 2022	DELCON 2022	Online	Dr Neena Jindal	
11-13 February, 2022	DELCON 2022	Online	Dr Tanu Sharma	
11-13 February, 2022	DELCON 2022	Online	Dr. Amit Srivastava	
Feb 05, 2022	ICGBSR 2022	Online	Dr. Amit Srivastava	
22-23 April, 2022	Management - A study on Work Life Balance and Stress Management	3rd Rajagiri Management Conference Online	Dr Neena Jindal	
22-23 April, 2022	Social Sciences -Human Rights and Sustainable Finance in India: A study on Awareness of Human Rights in Service sector Employees in India	3rd Rajagiri Management Conference Online	Dr Neena Jindal	
22-23 April, 2022	Management -A study on Work Life Balance and Stress Management	3rd Rajagiri Management Conference Online	Dr Tanu Sharma	
22-23 April, 2022	Social sciences -Human Rights and Sustainable Finance in India: A study on Awareness of Human Rights in Service sector Employees in India	3rd Rajagiri Management Conference Online	Dr Tanu Sharma	

• **Seminars Organized**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
Mar 8, 2022	International Women Day	JUIT	Anupriya Kaur	
June 25, 2022	Gender sensitization at Workplace	JUIT	Anupriya Kaur	
Mar 8, 2022	International Women Day	JUIT	Dr Neena Jindal	
June 25, 2022	Gender sensitization at Workplace	JUIT	Dr Neena Jindal	

- Seminars Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
15 August 2021	ELTAI Webinar 65 on "The NEED for Thinking Out of Box"	ELTAI (English Language Teachers Association of India)	Dr. Papiya Lahiri	
19 September 2021	ELTAI webinar 69 on "Life Skills for Personal and Professional Harmony"	ELTAI (English Language Teachers Association of India)	Dr. Papiya Lahiri	
25-26 March 2022	"Mapping Memory in the Wake of the Posthuman: India and Canada" presented my paper entitled "Re-imagining a New World Order: Cyborgs and Posthumanism"	IIT Bhubaneswar and sponsored by Shastri Indo-Canadian Institute.	Dr. Papiya Lahiri	

- Workshops Organized:**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Participation</u></b>	<b><u>Remarks</u></b>

- Workshops Attended**

<b><u>Dates</u></b>	<b><u>Subject</u></b>	<b><u>Venue</u></b>	<b><u>Faculty Name</u></b>	<b><u>Remarks</u></b>
23rd-28th & 30th-31st August 2021	'Reading: Back to Basics' (FDP)	English Language Teachers' Association of India (ELTAI) in association with Sri Ramakrishna Engineering College, Coimbatore (Online)	Dr. Papiya Lahiri	
10-11 January 2022	Online Faculty Development	National Institute of Teachers Training and	Dr. Papiya Lahiri	

	Programme on "Online Teaching and Evaluation"	Research, Chennai		
9-13 May 2022	Online Faculty Development Programme on "NEP 2020 Implementation in Higher Education Institutes"	Department of Curriculum Development Centre, National Institute of Teachers Training and Research NITTR, Chandigarh	Dr. Papiya Lahiri	
9-13 May 2022	Online Faculty Development Programme on "NEP 2020 Implementation in Higher Education Institutes"	Department of Curriculum Development Centre, National Institute of Teachers Training and Research NITTR, Chandigarh	Triambica Gautam	
(13th - 24th June, 2022)	Growing Role of Machine Learning in Cyber-Security	Online	Triambica Gautam	
6th –11th June 2022	Data Analytics and its Research Perspectives	Online	Triambica Gautam	
6th –11th June 2022	Data Analytics and its Research Perspectives	Online	Anupriya Kaur	
9-13 May 2022	Online Faculty Development Programme on "NEP 2020 Implementation in Higher Education Institutes"	Department of Curriculum Development Centre, National Institute of Teachers Training and Research NITTR, Chandigarh	Dr Neena Jindal	
9-13 May 2022	Online Faculty Development Programme on "NEP 2020 Implementation in Higher Education Institutes"	Department of Curriculum Development Centre, National Institute of Teachers Training and Research NITTR, Chandigarh	Dr Tanu Sharma	

9-13 May 2022	Online Faculty Development Programme on "NEP 2020 Implementation in Higher Education Institutes"	Department of Curriculum Development Centre, National Institute of Teachers Training and Research NITTR, Chandigarh	Dr. Amit Srivastava	
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- **Publications**

#### Journal Publications

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr. Amit Srivastava	Dimensions of globalisation and economic growth of India: exploring causal linkages	International Journal of Economic Policy in Emerging Economies, Vol 15, No. 2-4, pp 197-213	Scopus, ABDC "C"	
Dr. Amit Srivastava	Impact of Different Dimensions of Globalization on Firms' Performance: An Unbalanced Panel-Data Study of Firms Operating in India	World Review of Entrepreneurship, Management and Sustainable Development	Accepted, DOI Issued, ABDC "C", SCOPUS	
Dr. Amit Srivastava	Does Economic Growth Act As A Mediator Between Government Spending And Human Development? An Insight from Northeastern India	International Journal of Development and Conflict	Accepted, SCOPUS, ABDC "B"	
Dr. Papiya Lahiri	"Linguistic Exile and Cleft Identity in Jhumpa Lahiri's <i>In Other Words</i> and David Malouf's <i>An Imaginary Life</i> " published in	<b>Literary Voice: A Peer Reviewed Journal of English Studies</b>	UGC Care approved Group 'A' Journal, Indexed with Web of Sciences, ESCI, Cosmos, ESJI, 12OR, Cite Factor. Vol. 1, No. 17, March 2022. ISSN 2277-4521	



Dr Anupriya Kaur	Indian consumers tendency to exit amidst a complaint: A SEM approach	International Journal of Management Practice	Scopus 10.1504/IJMP.2023.10047976	
Dr Anupriya Kaur	Relationship between consumers attitude toward complaining and demographic characteristics: A study of Indian consumers	Journal of Positive School Psychology	Scopus Vol. 6(4), 10813-10823, 2022	

• **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Dr. Papiya Lahiri	"Official Apathy and Individual Suffering: Sharon Pollock's One Tiger to a Hill"	<b>Locating Transnational Spaces: Culture, Theatre and Cinema</b>	Faculty Business and Social Science University College of the North Canada and the International Association of Theatre Critics (IATC) in 2021	
Dr. Amit Srivastava	Dimensional Assessment of the Human Development Index with Special Reference to India	Research Issues in Business and Finance, Ed. Taufeeque Ahmad Siddiqui and Saif Siddiqui	Bloomsbury Publishers [ISBN: 978-93-56400-00-9].	
Dr. Amit Srivastava	Exploring The Mediation Effects Of Economic Growth Between Public Expenditure And Human Development For India	Flexibility, Innovation, and Sustainable Business, Ed. Anbananda	Springer Nature [ISBN: 978-981-19-1696-0, 504106_1]	

		m Ramesh and Santosh Rangnekar		
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• **Conference Publications**

<b>Name of Faculty</b>	<b>Title of Article presented</b>	<b>Name of conference</b>	<b>Reference</b>	<b>Dates</b>
Triambica Gautam	"Data Envelopment Analysis based Efficiency Measurement of Urban Cooperative Banks" in the organised from New Delhi from 11 <sup>th</sup> -13 <sup>th</sup> February, 2022 in the online mode.	DELCON 2022		11-13 <sup>th</sup> February, 2022
Dr Neena Jindal	Is Life Imprisonment a Violation of Human Rights	DELCON 2022		11-13 <sup>th</sup> February, 2022
Dr Tanu Sharma	Is Life Imprisonment a Violation of Human Rights	DELCON 2022		11-13 <sup>th</sup> February, 2022
Dr Tanu Sharma	Glass Ceiling: Existing Position and Future Directions	DELCON 2022		11-13 <sup>th</sup> February, 2022
Dr. Amit Srivastava	"Data Envelopment Analysis based Efficiency Measurement of Urban Cooperative Banks" in the organised from New Delhi from 11 <sup>th</sup> -13 <sup>th</sup> February, 2022 in the online mode.	DELCON 2022		11-13 <sup>th</sup> February, 2022
Dr. Amit Srivastava	Government Expenditure, Economic Growth and Human Development - International Review and Additional Insights	DELCON 2022		11-13 <sup>th</sup> February, 2022
Dr. Amit Srivastava	FDI-linked Spillovers and the Indian Economic Growth: The role of Country's Absorptive Capacity	DELCON 2022		11-13 <sup>th</sup> February, 2022

- **Guest Lectures**

- Dr. Amit Srivastava, Resource Person, Online One Week Faculty Development Programme on “Research Methodology and Data Analysis” from May 2-7, 2022, organized by Research and Development Cell, Bahra University, Shimla Hills

- **Visits Organised: NIL**

Institution visited	Dates	Aim of visit	Participation	
			Students	Faculty

- **Recognition & Awards: Nil**

- **Composition of Various Bodies**

- **Board of Studies (BOS)**

Sr. No	Name	Designation	Institution
1	Dr. Amit Srivastava	HoD	Dept of HSS, JUIT
2	Dr. Anupriya Kaur	Associate Professor	Dept of HSS, JUIT
3	Dr. Tanu Sharma	Assistant Professor	Dept of HSS, JUIT
4	Dr. Ashish Kumar	Professor	Dept of CE, JUIT

- **Student Consultative Committee**

1.	Dr. Anupriya Kaur	HoD, HSS
2.	Ms. Triambica Gautam	Faculty In charge

## **CENTRES**

### **LEARNING RESOURCE CENTRE (LIBRARY)**

Learning Resource Center (LRC) is the backbone of academic and research activities of the University and has been catering to the information needs of the faculty members, students, staffs and research scholars.

LRC is a separate block of three storied building embedded to main academic block which accommodates 260 students at a time in order to carry any activity related to study and research. The LRC has 42583 volumes of books and 1394 back volume of journals covering the disciplines of Computer Science Engineering, Electronics & Communication Engineering, Information Technology, Civil & Environmental Engineering, Biotechnology, Bioinformatics, Mathematics, Physics, Material Science, Management, Competitive Exams and other general subject areas. The Collection comprises of Print monograph such as Textbooks, Reference Books, Encyclopedias, Handbooks, Dictionaries, Theses, Standards, etc. It has been subscribing to 70 periodicals (journals and magazines) in print format in order to supplement teaching and research activities of the university. It also has a collection of Non-book materials include audio/video cassettes, CD-ROM discs, DVD-ROM discs etc.

LRC is subscribing to various online databases such as ACM, ASCE, IEEE, Springer e-journals, SIAM E-Books, ProQuest, etc. These e-resources accommodate full-text of e-books, and other electronic resources such as Journals, Conference Proceedings, Transactions, Magazines and Reports which are accessible over IP range of the campus. LRC has also acquired NPTEL (National Programme on Technology Enhanced Learning) course contents from IIT Kanpur and hosting it on a high capacity server for providing seamless access to users within the campus. There are 58 dedicated computer nodes and are fully connected with LAN & WiFi Internet facility. Students, faculty, research scholars can use computer facility for the purpose of browsing internet, accessing journals, reading course materials during the opening hours. The library is fully computerized and bar-coded with latest version of Library Management Software known as 'Liberty' software. The library has started migrating from Liberty to Koha which is an open source integrated library management system. The collection of the library can be browsed, searched and explored with the help of OPAC (Online Public Access Catalogue) anywhere in the campus. Library has been providing dedicated terminals to access OPAC throughout the library premises. Furthermore, it has a separate dynamic website.

LRC remains open from 9.00 AM to 12:00 PM [midnight] except the holidays specified in the University's academic calendar. It has implemented an integrated electromagnetic security system from 3M, USA for keeping a check on print materials movement. It has also developed an institutional repository by using Dspace an Open Source Software for maintaining scholarly output of the university. Library is extending various quality services such as subject support, research support, maintaining JUIT publications database, providing anti-plagiarism detection by using Turnitin & Ouriginal (previously known as Urkund) software, locker facility for research scholars and various alert services.

LRC is an active member of Developing Library Network (DELNET), New Delhi for resource sharing, document delivery services among the member libraries and supplementing the needs of the resources which are not available with the institute. It is also participating actively in Shodhganga (a reservoir of Theses), Shodhgangotri- a repository of Synopses/Research Proposals for PhD) and ESS-an e-resource subscription consortium of INFLIBNET. LRC has also become an active member of National Digital Library of India (NDL) to provide free access to educational contents.

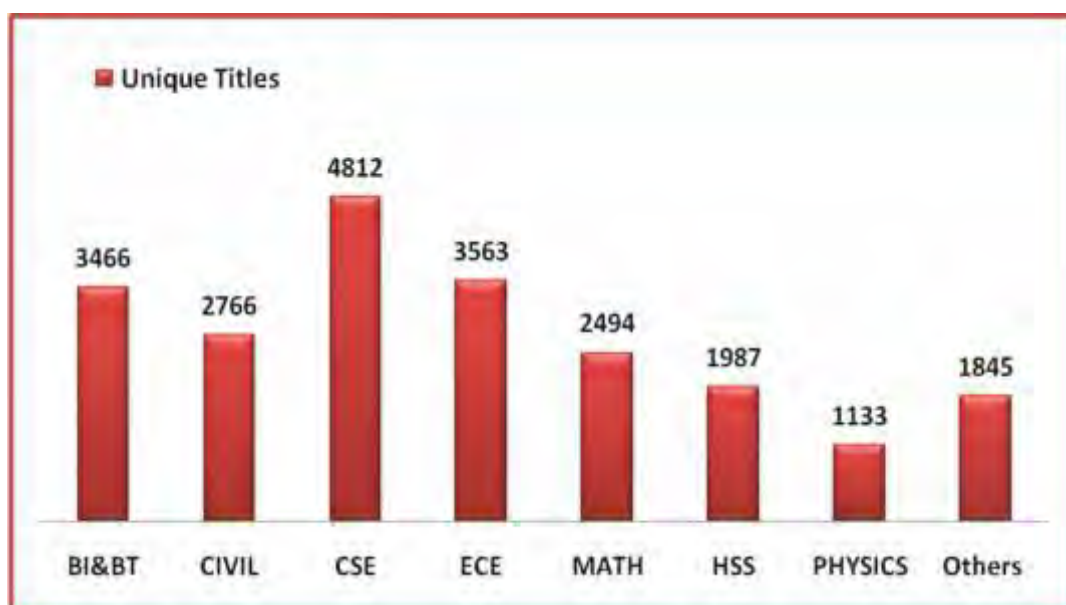
### Resource Collections

- Unique Titles : 22066
- Total Copies : 42583

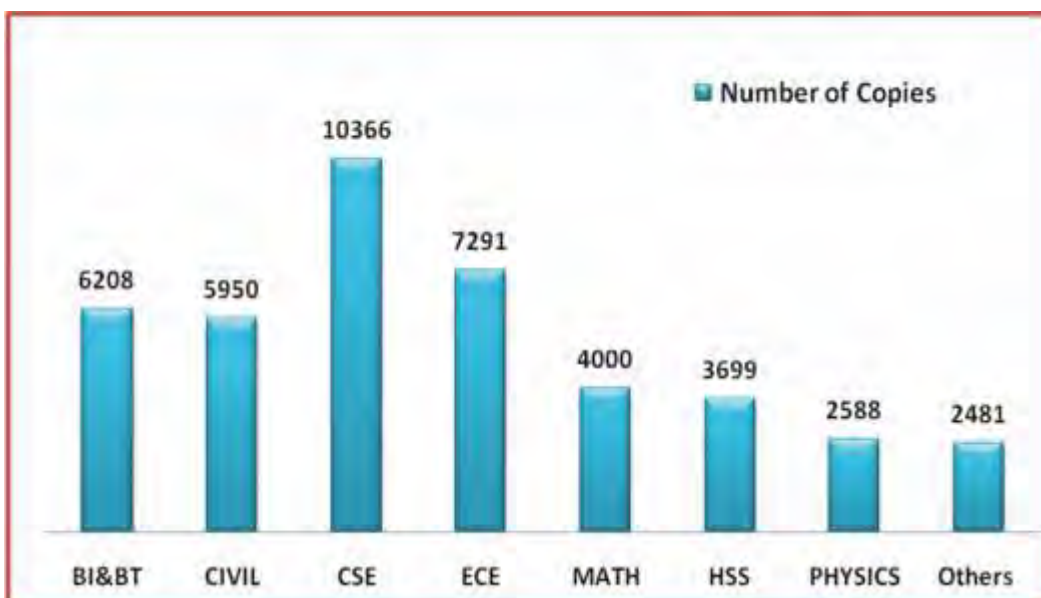
### Department.-wise Books Collection:

Departments	Titles	Copies
Biotechnology and Bioinformatics	3466	6208
Civil Engineering	2766	5950
Computer Science & Engineering and Information Technology	4812	10366
Electronics & Communication Engineering	3563	7291
Humanities & Social Sciences	2494	4000
Mathematics	1987	3699
Physics and Materials Science	1133	2588
Other General Collections	1845	2481
Total Collection	22066	42583

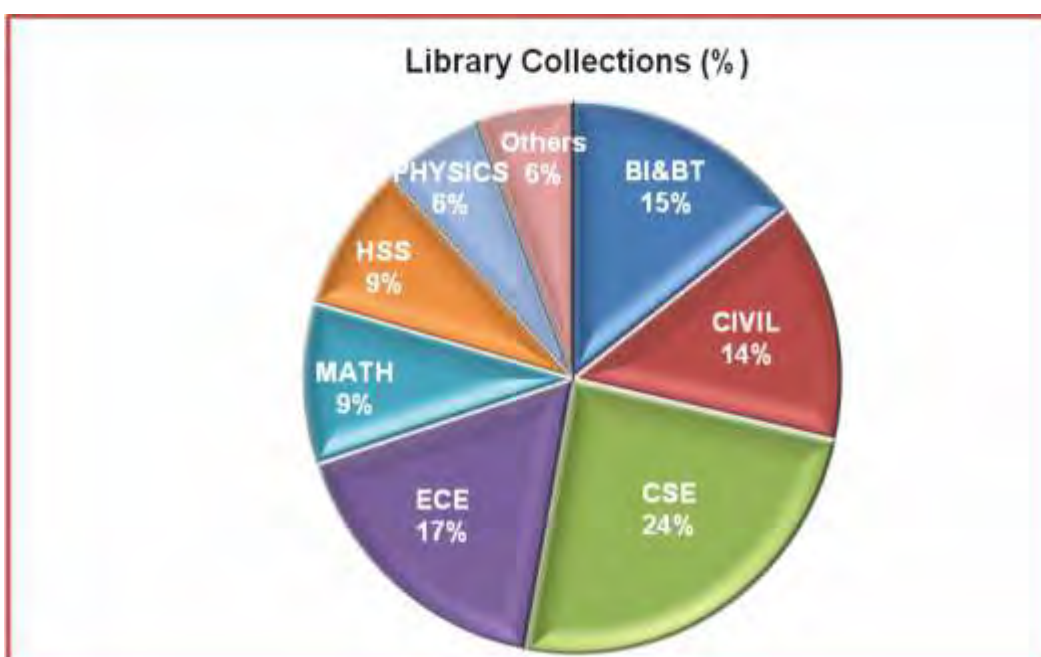
### Subject-wise unique titles (Books) in the library collection:



### Subject-wise total volumes or copies (Books) in the library collection:



Subject-wise coverage of total library collection (Books) in percentage (%):



BT&BI=Biotechnology and Bioinformatics; CIVIL=Civil Engineering;  
 CSE=Computer Science and Engineering; ECE=Electronics and  
 Communication Engineering; HSS=Humanities and Social Sciences;  
 MATH=Mathematics; PHYSICS=Physics and Material Science;  
 OTHERS=General books.

**Online Databases Accessible at JUIT:**

S. No	Database	E-Books	No. of Journals	Conference proceeding and other reports	Total
1	ACM (Association of Computer Machinery)	-	149	994	1143
2	ASCE (American Society of Civil Engineers)	-	35	-	35
3	IEEE (Institute of Electrical and Electronics Engineers)	-	206	-	206
4	Springer Nature	-	1714	-	1714
5	ProQuest	29	4450	307	4786
6	SIAM E-Books	372	-	-	372

**Other Collections (in Print):**

Type of Resource	Number
Print Journals (National)	30
Print Magazines	40
Back Volume Journals	1394
BIS/IRC Code	527
Ph.D Theses	246
Dissertations (M.Tech & M.Sc.)	743
Project Reports (B.Tech)	2969
Newspapers (14 Titles)	32

## **IT CENTRE**

The main objectives of the Server Room ( IT Center) are to provide support to all the members of JUIT on all aspects of academic computing, to implement and maintain IT infrastructure and application software, to impart introductory and advanced instructions to users, generate trained manpower to maintain IT infrastructure (servers, desktops, network, projectors, printers, ups, Wi-Fi, sound system, scanner ), to provide support to institute computerization efforts, to do in house research & development, and to serve a user population of more than 3500 users consisting of undergraduate students, postgraduate students, research scholars, faculty and staff of the institute.

In addition, it also owns the responsibility to develop and implement application software for various needs of the Institute like finance, payroll, results, MIS reports and electronic attendance system etc.

- **General Computing Facilities**

The Server Room is equipped with IBM X series and HP rack Server for high performance Unix Computing Server, Intel Xeon servers with multiple processors, High end Intel Pentium server with multiple processors, various engineering and technical computing software, network management tools, Client/Server Database computing system connected over a switched fast Ethernet with Optical fiber backbone.

For printing needs JUIT has total 89 printers with 16 heavy duty Network Printers.

- **Hardware configuration**

### **SERVER DETAILS**

S.No	Server	Configuration	Quantity
1	IBM System X 3400	Intel® XEON 2.0 GHz 4 GB RAM 956.32 GB SCIC HDD with RAID Support.	6
2	Lenovo workstation	Lenovo workstation E5-1603	1
3	IBM X Series 3500	Intel® XEON 2.26 GHz 6 GB DDR III RAM 1200 GB SCIC HDD with RAID 5 Support , 17 inch TFT monitor	3
4	IBM Server X3100	IBM Server intel XEON X3100 with 8 GB DDR3 ,500 GB HDD and TFT screen	3
5	IBM x-3400 M3	Server IBM Model x-3400 M3 with intel xeon quad core processor,8 GB RAM,300 GB X 4 HDD,18.5 inch TFT	1
6	HP	HP ML 110G6 Server Intel Xeon Quad Core X3430 Processor with 4 gb RAM ,250 GB Sata HDD and 18.5 TFT Screen	2



7	IBM X3300	IBM server x3300 m4 server 16 gb ram,1200 gb hdd with raid 5 card	1
8	Dell workstation	Dell Precision Tower 3420 with Intel Xeon E3-1225 3.3 ghz,8gb ddr4,19 inch tft and mouse	10
9	HP	hp dl 60 gen 9 intel xeon e5 (2.1 ghz/8core/20 mb/85w) Additional processor 2620 v4 2.1 ghz,8 core & 20 mb l3,16 gb X3 ram,HPE 240 smart HBA,hpe 6 tb hdd X4	1
10	HP	hp dl 60 gen 9 intel xeon e5 (2.1 ghz/8core/20 mb/85w) Additional processor 2620 v4 2.1 ghz,8 core & 20 mb l3,16 gb X3 ram,HPE 240 smart HBA,hpe 3 tb hdd X3	2
11	HP	hp dl 60 gen 9 intel xeon e5 (2.1 ghz/8core/20 mb/85w) Additional processor 2620 v4 2.1 ghz,8 core & 20 mb l3,16 gb X3 ram,HPE 240 smart HBA,hpe 2 tb hdd X3	1
12	Media server	UFO Media server with vsat for movie	1
13	Lenove	Lenovo data center solution think system sr530 with win server 2016. Intel xeon silver 4114 with 2.2 ghz processor ( 2 Nos) 64 gb ddr 4 ram,6 tb HDD *4 ,3 year onsite warranty	3
14	sophos	XG450 rev.2 HW Appliance with 8 GE ports,2 SFP+ ports,2 expansion bays for optional Flexi Port modules,2XSSD + Base License (inc FW,VPN & wireless)for unlimited users+ Power cable	2
		Total Number Of Servers	37

#### **DESKTOP DETAILS**

S.No	Brand	CONFIGURATIONS	QTY
1	IBM	Core 2 due 2.4 Ghz, 160 GB HDD & 1 GB RAM 17 inch Monitor	22
2	IBM	Dule core 1.8 Ghz,80 GB HDD ,1 GB RAM & 17 inch Monitor	40
3	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	50
4	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	125
5	IBM	core i3-530 (2.92 GHz) with 2 GB RAM ,250 GB Sata HDD,18.5 inch TFT Monitor	90
6	IBM	Core I3- 2100 3.10 GHz with 2 GB RAM ,320 GB Sata HDD,18.5 inch TFT Monitor	80

7	IBM	Core I3- 2100 3.10 GHz with 4 GB RAM ,500 GB Sata HDD,dvd rom,18.5 inch TFT Monitor	120
8	HP	Intel core i5-6500 3.2 G 6M 2133 4C CPU with 18.5 inch TFT ,KB and Mouse	190
9	Dell	Desktop Dell i5 7th gen,8 gb ram,1 tb HDD with 18.5 inch tft	300
10	HP	HP 280 G3 MT desktop	10
11	HP	Desktop Model HP 280 G4 MT	10
12	Dell	Dell Desktop intel core i7-8700, 8 gb dd4 ram, 19 inch led, and win10 pro 64 bit. 1tb hdd	10
13	Dell	Dell optiplex 3060 Minitower intel core i7 8700 with 8 gb ddr4 ram ,1 tb hdd ,TFT and win 10 pro preloaded	5
14	Dell	dell optiplex 5080 intel core i7 with 16 gb ddr4 ram ,1 tb hdd ,TFT and win 10 pro preloaded with 5 year warranty	70
		<b>Total Number of computers</b>	1122

#### SOFTWARE DETAILS

S.No	Product Title	No of Licenses
1	Hyperchem Release 7	10
2	Matlab ver 7.1	30
	Simulink	30
	CDMA Reference Blockset	5
	Communications Blockset	5
	Communications Toolbox	5
	Signal Processing Toolbox	5
	Wavelet Toolbox	5
3	MS Office Professional Plus 2007	100
4	Windows Server Enterprises 2003	3
5	Adobe Premier Pro Ver 7.0	20
6	Cold Fusion MVLP Ver 6.1	10
7	Flash MX 2004 MVLP	20
8	Micro Media Director Shockwave Studio for windows English AE	10
9	SQL Server 2000 Standard Edtn	1
10	Windows Server CAL 2003 English OLP NL AE Device CAI	4
11	VStudio .Net Pro 2003 Win32 English OLP NL AE	15

12	Office XP Pro Win 32 English	20
13	VStudio .Net Pro 2002 Win32 English	9
14	ISA Server 2000 English	1
15	Windows Advanced Svr 2000 English.	1
	Windows CAL 2000 English OLP NL AE	23
16	DB2 UBD Enterprise Server Edition.	1
17	IBM Tivoli Storage Managed Processor	1
18	Cyberoam software for internet	1
19	Schrodinger For Biotech	1 user 25 Token
20	Lotus Domain	100
21	AutoCad 2005 Education	5
22	A'Desk 3 ds Max 6 (Edu)	20
23	Rational suit Enterprise Software	20
24	Mathematica Ver 5.0	10
25	Autocad 2004 Network User	10
26	Maple 9.5	1
27	Sun Solrix Ver 8	35
28	Window XP Proffesional	20
29	Oracle 9i	10
30	Visual Prolog ver 6.1	15
31	Soft image xsi Ver 4.0	20
32	Staad Pro	5
33	SPSS Base 16.0	15
34	Oracle 11g	1
35	Clarity Digital Multimedia Language Lab	31
	Clarity English Teaching Software from U.K	
	1. Sky Pronunciation Suite	5
	2. Connected Speech	5
	3. Tense Buster Compilation	5
36	NI Lab View Academic Site License 2010	50
37	Pasw Amos 18.0	3
38	Windows Server Enterprise 2008 with media	10
39	Bentley Civil of perpetual network based software a.Mx Road V8 b.Power Civil c.Power Map	5
40	Ansys release 12.1	1
41	HyperLynx 3d EM Super Structure Designer V 15.2	3
42	Auto CAD 2013	30
43	Matlab ver 10	50
	Simulink	10
	Filter Design Toolbox	10

	Communications Blockset	10
	Communications Toolbox	10
	Signal Processing Toolbox	10
	Video and Image processing Blockser	10
44	Window server standard 2012	4
45	Geo 5 suit of Software with various modules	50
46	Xilinx UEF-VIVADO_SYSTEM	25
	Base2 100	7
	Atlys Spartan-6 FPGA Development Board	1
47	8.1 V Clarity Snet Language Lab software 1 teacher + 30 User	30 user
	Tense Buster V9 for 20 user	20 user
	Business writing for 30 user	30 user
48	SPSS Base 24.0	1
	SPSS Advance Statistics	1
	SPSS regression	1
	SPSS Neural Network	1
	SPSS conjoint	1
	SPSS Amos 24.0	1
	<b>SPSS Categories</b>	<b>1</b>
49	Acrobat Pro 2017	10
50	Windows server 2016 pro	4
51	SIMULIA Academic Teaching Suite Q9T for 20 user civil department	1
	Matlab 2018 b	25
	simulink	5
	Signal Processing toolbox	5
	dsp system toolbox	5
	communications toolbox	5
	control system toolbox	2
	image processing toolbox	2
	statistics and machine learning	2
	deep learning toolbox	2
	antenna toolbox	2
52	Full guard Subscriptions for XG450 (3 years) Full guard subscription includes Network Protection,web protection,Email protection,Web server protection and Enhanced Support	2
53	windows 10 enterprise E3	5
54	Norton Antivirus	5

## Network Details

S.NO	NAME OF EQUIPMENT	Quantity	MAKE
1	M220 Access Point	10	HP
2	V1910-24G POE switch	2	HP
3	Cisco air ap 1041 n a k9 wifi	10	cisco
4	Cisco air ap 1131 ag a k9	4	Cisco
5	5 port Dlink switch	5	Dlink
6	Catalyst 2960 48 port switch	15	cisco
7	AIR AP 1131AG-A-K9	5	cisco
8	Cisco Catalyst 9400 Series 7 slot core switch	1	Cisco
9	Catalyst 2960 24 10/100	4	Cisco
10	wifi router d link	20	dlink
11	16 Port Switch D link	1	D Link
12	Cisco 2921 w/3 GE,4 512 MB DRAM Router	1	Cisco
13	Catalyst 2960 48 10/100	5	Cisco
14	Cisco 2811 Router	1	Cisco
15	Switch 4210 26 Port 3 COM	10	3 COM
16	Core Switch 3 com 4060	1	3 COM
17	Router Cisco 2600 series	1	cisco
18	3 COM 4400 series 48 Port	30	3 COM
19	3COM 4400 Series 24 Port	2	3 COM
20	HP switch 24 G	5	HP
21	Cisco S business Switch 8 Port	3	cisco
	cisco catalyst 2960 24 port 10/100	2	cisco
	cisco catalyst 2960 48 port 10/100	5	cisco
22	Aruba switch 2530 48 G	11	Aruba
23	Fiber switch 48 port core	1	
24	WAN Controller	1	
25	Fiber switch 48 port with 12 port POE	2	
26	POE switch 8 Port	1	
27	ruckus Access Points r510	300	Ruckus
28	Cisco 9200 L 48 T - 4x - E	2	

**Total Number of switches and Access point** 457

<b>Total Number of Router</b>	<b>3</b>
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<b>Cisco Core switch 9400 series</b>	<b>1</b>
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The Server Room has a Client/Server Database Computing System – Oracle 11g with Developer 2000 version 6.0 at front end, the platform is windows 2003/2008.

### **Network Services**

The University Local Area Network (LAN) is a state of the art switched network with Fiber Optical and enhanced CAT5e/CAT6 UTP Backbone. It consists of more than 3500 network access points spread using 118 switches, 3 Cisco Routers, and 335 access point. Entire college campus including academic block, Faculty residence, SOR and all hostels is wifi and internet is provided in every room of student's hostel, faculty & staff residence, JUIT hospital, mess, laboratories and SOR.

We have 1 GBPS (1: 1) internet lease line circuit from BSNL and 75 MBPS from Railtel on OFC. Apart from internet and intranet many more services including mail, web, and library book search, domain name, antivirus and software upgrades are being provided over this network.

JUIT is using Sophos XG 450 security Appliance to manage internet bandwidth and mailing services. Sophos is consists of software firewall, anti spam controller, content filtering and antivirus protection at gateway level. Lotus Domino is being used by JUIT for official mailing services.

Video conferencing facility provided in Board room with Polycom latest hardware including Eagle Eye IV-12x camera, mic, Panasonic LED Monitor 55"

### **INTERNATIONAL LINKAGES OF THE UNIVERSITY:**

JUIT endeavors worldwide collaborations with universities, research laboratories and industries with a view to making the best academic expertise. The JUIT has tie ups with following Universities and Institutions:

1. Professor Entian's Group at the Institute of Microbiology, Johann Wolfgang Goethe, University of Frankfurt, Germany
2. The Finnish Universities of Applied Science, Finland
3. University of Nebraska, USA
4. South Dakota School of Mines and Technology, USA
5. SAP AG, Germany
6. National School of Applied Sciences (ENSATg), Morocco
7. Pushchino State Natural Science Institute, Russia
8. Southern Federal University, Russia
9. G.K. Skryabin Institute of Biochemistry and physiology of microorganisms of Russian Academy of Sciences, Russia
10. Tel Aviv university, Israel
11. Pokhara University, Kaski, Nepal.

## **ACADEMIC ADMINISTRATION**

### **Admission Process**

- **UG Program**

During the academic session 2020-21, admissions were carried based on JEE (Mains) and on the basis of 10+2 marks merit basis.

In BTech Biotechnology & Bioinformatics 50% seats were filled through JEE (Mains) All India Ranking basis and 50% seats were on the basis of 10+2 Merit Basis.

Admission to BTech 2<sup>nd</sup> year under (Lateral Entry) were made on the merit marks of three year diploma / BE / BTech 1<sup>st</sup> year in related branch of engineering.

- **PG Program**

Admission to PG programs (MTech) were offered to the eligible candidates having valid GATE score and through PGET-2020 conducted by University for Non GATE qualified candidates followed by an interview by the PG programme Selection Board.

- **Doctoral Programme**

Admission to the PhD programs were offered to the eligible candidates having UGC/CSIR NET/SLET and through PhD Entrance Examination conducted by the University for Non NET / SLET qualified candidates followed by an interview of the shortlisted candidates qualified in entrance examination based on their inter se merit among the shortlisted candidates.

- **Students Enrollment**

The status of student strength as on 31 Aug 2022 is given below.

<b><u>Year of Study</u></b>	<b><u>UG Prog.</u></b>	<b><u>PG Prog.</u></b>	<b><u>Integrated Degree Prog.</u></b>
6 <sup>th</sup> Year	02		
5 <sup>th</sup> Year	07		
4 <sup>th</sup> Year	387		03
3 <sup>rd</sup> Year	367		
2 <sup>nd</sup> Year	404	37	
1 <sup>st</sup> Year	477	40	

PhD Scholars Registered during the Academic Session 2020-21 were 124



- **Faculty**

The Unique feature of the University is the high quality of faculty on its rolls. The Faculty details with their terminal qualification are at **Appendix-F**.

- **Results**

The performance of students in the university is graded in terms of Semester Grade Point Average (SGPA) and Cumulative Grade Average (CGPA) over a scale of 10. An analysis of results of last four years is given in **Appendix-G**.

- **Scholarships**

1. **Prof. William C Webster Merit & Means Scholarship:** Eligible students get a tuition fee waiver for a year upto a maximum of one semester's fees. The scholarship was started in the year 2004-05.

2. **Admission to Meritorious Students:** The Management has approved that students who take admission in the first year of the 4-year UG program in academic session 2008-09 onwards, with an All India Rank of less than 1000 in the JEE conducted by CBSE, shall be provided free education for the entire duration of under graduate program.

3. **Students from Bhutan under Scholarship Scheme** – Students from Bhutan are exempted from paying the Tuition fee & Hostel charges.

4. **Teaching Assistantship for MTech Students**

GATE qualified students admitted to MTech program are eligible for Teaching Assistantship of Rs.8000/- per month. However, continuation of above fellowship is subject to meeting the desired criteria as the terms of JUIT Regulations & Ordinances.

5. **Research Fellowship for PhD Students**

Full time PhD scholars may be awarded Research Fellowship of Rs.22000/- per month for the maximum duration of 03 years. The above fellowship is subject to approval and availability of funds.

## **JUIT YOUTH CLUB (JYC)**

- **ABOUT JYC**

The JUIT Youth Club (JYC) is an autonomous student body, responsible for organising various events throughout the year. Student members of the JYC put in their efforts to ensure everything from event arrangements, proceedings to inviting guests and faculty goes on smoothly. Students work really hard, without any inhibitions regarding time or effort to make these events successful.

- **Orientation - 15th November 2021**

JYC conducted their orientation for the year 2021-22 in both online and offline mode. JYC handles literary and debating, music and theater, dance and cultural, sports, environment ecology and health, technical science as clubs and registration and hospitality, media and publicity, event management, creative arts, disciplinary and finance as committees. The offline orientation was conducted on 15th Nov, 2021; in LT2 at 5:30 pm. Aditya Saxena (President) and Devansh Gupta (Treasurer) introduced the JYC. The respective co-ordinators introduced their club/committee and showed their work clips. The ex JYC president addressed the audience and congratulated the entire team for the new tenure. The online interaction was conducted on 16th Nov, for the students not present on campus which was headed by the coordinators online. Introduction was given; presentations were made by the respective clubs/committees. Students showed great enthusiasm throughout, and were given the opportunity to interact with the JYC council regarding any doubts or queries. All covid guidelines were kept in mind and discipline was maintained throughout.

- **Semester Tournament 1 -30th November to 2nd December 2021**

From 30th November to 2nd December, 2021, the Sports Club of Jaypee University of Information and Technology hosted a semester tournament for students to demonstrate their talent. The college experienced its first tournament after a long period of time, as the campus was closed due to lockdown. The enthusiasm in students was clearly visible as they actively participated in the various sports. Students were allowed to participate in a variety of activities during the three-day competition, including football, basketball, volleyball, cricket, table tennis, chess, and badminton.

Regardless of the outcome, all of the teams gave their best and demonstrated true sportsmanship. The finals of all sports drew large crowds who came to support their favorite teams.

Certificates for participation were presented to all teams and individuals that participated in the tournament, and prizes were handed to the winners in the closing ceremony of the fun filled 3 days.

- **Diksha - 4th December 2021**

JYC Cultural Club organized 'Diksha 2021 - The Fresher's Night' in the Auditorium on 4th December, 2021. The event began by welcoming the guests which was followed by the traditional lamp lighting ceremony. The past JYC president addressed the audience and handed over the responsibilities to the current president. The night saw a mixture of various

traditional and western dances, mimes, plays and singing performances. Apocalypse and F-society rocked the floor with their freestyle, western performances. It was a tie between both teams and they won the award for best dance in western category. Also staged were a series of colorful acts, such as the Monologue by Annu from Young Thespians which shed light on the reality of mental health these days and Ishan presented a heartfelt poetry called 'Darasal' portraying a new take on love. The Stage Players presented an astounding act about the story of 'Sooryaputra- Karn'. A bollywood medley was performed by Tanya and Nayan who seized the stage with their melody. To evoke the nostalgia and take us back to the 90's, Meghna and Roodransh from Messengers gave a mesmerizing musical performance. To select the Mr. and Ms. Fresher 2021, two rounds of Ramp Walk were held. The freshers walked down the ramp with their best foot forward bringing along some Glitz, Glam and fashion. The second round- Question and Answers round, led to the selection of the winners based on their intellect. Tanish Mahjan was declared as Mr. Fresher 2021 and Sejal Thakur was announced as Ms. Fresher 2021. In the traditional dance category, the night was graced with a performance of Himachali folk dance 'Natti' by Pakke Pahadiye. The last performance of the night was 'Bhangra' by the United Bhangra Crew, which sent an extreme energy wave throughout the auditorium. Both the performances were loved by the judges and tied as the award winners under the traditional dance category. The announcement of the winners brought the function to a close. The students then headed out for a feast in the mess and discipline, decorum was maintained throughout the event. The participants and audience showed great enthusiasm and with that the event brought all sorts of new possibilities for the upcoming tenure.

- **UI/UX workshop - 5th January 2022 onwards (12 days)**

Technical Sciences, Movies and Photography Club of JUIT Youth Club have organized an UI/UX & Web Development Bootcamp from 5th Jan, 2022 to 24th Jan, 2022.

This bootcamp has provided intermediate knowledge of UI/UX and Web Development which includes UI, UX, Wireframing, Prototyping, Tools Figma, Main Interface Designing, Portfolio designing, HTML, CSS, JavaScript, Node Js & react framework.

It was a 12 days long certified course for which a candidate had to submit all the assignments with 70 % attendance in the sessions.

Dates	Topics
5 <sup>th</sup> January, 2022	UI, UX, Wire framing, Prototyping, Tools Figma
6 <sup>th</sup> January, 2022	Main Interface Designing, Trends Typography
7 <sup>th</sup> January, 2022	Working on Portfolio complete and Doubts
10 <sup>th</sup> January, 2022	Basic HTML-Tags and Container
11 <sup>th</sup> January, 2022	Form and Basic CSS
13 <sup>th</sup> January, 2022	Box Model and Flex Box
14 <sup>th</sup> January, 2022	Grid and Doubts and Assignment Discussion
17 <sup>th</sup> January, 2022	JS Basics
18 <sup>th</sup> January, 2022	DOM Manipulation and CSS with JS
20 <sup>th</sup> January, 2022	Node JS and npm and Assignment Discussion
21 <sup>st</sup> January, 2022	Create React App and React Basics
24 <sup>th</sup> January, 2022	Assignment Discussion

Total 206 participants had been registered. Organizing team consisted of 6 students who were supervised by the coordinators of the Technical Sciences, Movies & Photography Club.

3 assignments were given which includes one assignment of UI/UX & two assignments of web development. The bootcamp completed successfully and all the students received certificates for their hard work and everybody learnt several useful skills.

- **Smaran (A week to commemorate the freedom movement of India) - 22nd - 26th January 2022**

JYC organized an event called Smaran- a week to commemorate the Freedom Movement of India on the occasion of the 73rd Republic day, from 22 Jan, 2022 to 26 Jan 2022. This event was co-hosted by the Theater and Music Club, Creative Arts Committee, and Registration and Hospitality Committee of JYC. In this event a quiz, a poem competition and an art competition were organized. The first event that was organized by the Registration and Hospitality Committee was a quiz competition to celebrate the Freedom Movement of India. It was a thirty minute session. The host of the event gave a brief introduction about the sacrifice and valor of Subhash Chandra Bose. Then the participants were provided with a google form. The event was held virtually. There was consistent interaction with the participants. The winners and participants were awarded certificates. Another event was an art competition organized by the Creative Arts Committee. The event was held to honour the country's 73rd Republic Day. The participants had to use art to express themselves. They submitted their art in the form of sketches, paintings, doodling, stamp art, impression art, abstract and figurative art. The submissions were collected via google form. The winners were awarded certificates. A poem competition was organized virtually by the Theatre and Music Club. In this the participants had to submit their self-composed poetry on the theme 'Sarhad Par Sena Baithi Hain'. The submissions were collected through google forms. The poetry submissions were acquired as videos to capture the essence of the poem. The winners were awarded certificates. There

were more than seventy participants in the events. The event was highly interactive and informative. This event was a culmination of imagination, talent and creativity.

- **JUIT Radio - 13th February 2022**

JYC's Literary and Debating Club conducted its first radio show called the "JUIT Radio" on 13 February, 2022. It was a fun and interactive event which was hosted by the club in online mode in order to not let the pandemic bring a haunt to the student's parade. The show was witty and entertaining, with mesmerizing poetry, stories from the heartland, and some quirky talks with our RJ's. The participants showcased their poetic sides and touched the listeners with their admiring and heartwarming poems.

Students of JUIT came up with their own horror and thriller stories which left the listener's jaws open. This proved to be a great platform for participants to showcase their deep and fascinating poetry skills. An interesting segment introduced in the show was "JUIT News", which surprised the listeners and got them into a candid chat with our RJs. An alumnus of JUIT graced the occasion and recited his poetry which left the listeners in awe. The show ended with an exuberant musical performance that got everyone swaying with the melody. The event was witnessed by over a hundred people and overall it was a great success and

- **Art Contest 15th February**

With the idea of going beyond the classics, the Creative arts committee of JYC organised an art contest for the students of JUIT. As it is always because of those illusions constructed by the artists, where one canvas tells the entire story. The aim of this event was to bring out the artistic skills buried deep in the blood of participants to convey that one theme through their work. Participants brought the stories to life with their imagination on a canvas with retro and cyberpunk elements. The winners of this contest were Ishika Shrivastava, Rishik and Varuni Chandel.

- **The Write Minded (Workshop to boost speaking and writing skills) - 5th March 2022**

JYC Literary and debating club organized a two day workshop called "Write Minded" from 5-6 March, 2022. The workshop was held for the members of JYC to improve and enhance their verbal and written skills. On the first day of the workshop topics concerning the speaking skills were covered such as debating and some basic rules of MUN. The main motive was to encourage students to participate in events and work on their verbal skills while still in college. Hand gestures, response, mental process, and analysis were all covered as basic soft skills while speaking. The aim of the session was to make it interactive and to encourage students to speak confidently.

The second day of the workshop was focused on written skills. Topics discussed were poetry writing, content writing and report writing. Topics with respect to poetry were covered along with information on the types and various forms of poetry. To make the session more educational and interactive the students were given small tasks. The main motive was to interact with the students and promote them to put their ideas into writing. This workshop was organized to foster the habit of speaking and writing among the students.

There were around over forty participants that attended the workshop. The event was highly interactive and informative.

- **International women's day celebration - 8th March 2022**

"A woman is a full circle, within her is the power to create, nurture and transform"

On the auspicious occasion of International Women's Day, Jaypee University of Information Technology organized a session on 'Women Empowerment' by Ms. Kritika Kulahari, Deputy Commissioner Solan (HP) and our Chief Guest for the evening. The session took place in LT-3 from 4 to 5 pm. In this session the students as well as all the faculty members of JUIT along with their family were cordially invited to be a part of the wonderful evening. The event started at 4 pm and the very first thing that was done was Lamp Lighting. Then our guest of honour Ms. Kritika Kulahari was welcomed with a wonderful speech by our Vice Chancellor Dr. Rajendra Kumar Sharma. After the Welcome Speech Ms. Kritika Kulahari delivered her thoughts on 'Women Empowerment'. Her speech was quite mesmerizing. She also inaugurated a new club of JYC named KOSHISH Club. The inauguration of the new club was followed by a Vote of Thanks given by Dr. Ruchi Verma. The event successfully ended around 5:15 pm.

- **Murios 16.025th -27th March 2022**

Jaypee University of Information and Technology inaugurated MURIOUS 16.0, the biggest Tech fest of the year, organized by Technical Sciences, Movies and Photography club of JYC in association with IEEE- JUIT SB, ACM -JUIT and JUIT Alumni Cell on 25th March 2022. The 3-day event started with the inauguration ceremony in Lecture Theatre-3 in the presence of honorable Vice-Chancellor Prof. (Dr.) Rajendra Kumar Sharma, Dean of academics Prof. (Dr.) Ashok Kumar Gupta, (Dr.) Vivek Kumar Sehgal, JYC Faculty Incharge Dr. Amit Srivastava, and JYC president Aditya Saxena.

The Day-1 Ceremony began with the lamp lighting, which was followed by the Vice-Chancellor's motivating and illuminating speech, which marked the commencement of the events. The Expanse- Hackathon, an 18-hour coding competition, was the first event on the schedule. The fest continued with gaming events that included Valorant gaming and also a BGMI tournament.

Mr Ankit Khare, a JUIT alumnus from the 2008 batch, delivered a Tech Talk on Day 2. He is the recipient of the Vice Chancellor's Gold Medal and currently works at Chivalric Small Finance Bank as Chief Technology Officer (CTO). Mr Ankit Khare's outstanding tech talk was followed by "The Continental," a coding competition in which JUIT's coding aficionados competed. The coding puzzles were themed after the popular film franchise "John Wick". The Valorant and BGMI semi-finals and finals were held in the evening, and FIFA was held in Dhyani Kaksh for some football lovers.

Project Euclid, a two-hour coding competition, was held on the third day. After the Project Euclid winners were announced, Mr Raj Jain, a JUIT alumnus from the 2007-ECE batch who is now the founder-CEO of Knoewit, gave a fantastic Tech Talk. He delivered an energizing and motivating speech to the students. Following the Tech talk, Code Relay was planned as per the schedule.

Synchrotron-2022 was held to commemorate the end of the spectacular Tech Fest. The ceremony began with the lamp lighting, a customary tradition at the institute. Following that, the participants took part in a glamorous Ramp walk in pairs. The band performed euphonious

melodies, and the student dance groups put on an energetic dance show. A colorful drama and contagious mime were unveiled by Stage Players and The Thespians. When Pakke Pahadiye and United Bhangra Crew performed ethnic dances, the audience was enthralled. The pulsating atmosphere, flashing lights, and foot-tapping music perfectly set the tone for the occasion. As performances took center stage, the enthusiasm grew to a joyous peak. The event ended with a vote of thanks, recognising the organizers' outstanding work and meticulous planning in making the event a success!

- **Semester Tournament 29th April 2022**

From the 9th to the 12th of April, 2022, the Sports Club of Jaypee University of Information and Technology hosted a semester tournament for students to demonstrate their talent. Students were allowed to participate in a variety of activities during the four-day competition, including football, basketball, volleyball, cricket, table tennis, chess, and badminton.

Regardless of the outcome, all of the teams gave their best and demonstrated true sportsmanship. The finals of all sports drew large crowds who came to support their favorite teams.

Certificates for participation were presented to all teams and individuals that participated in the tournament, and prizes were handed to the winners in the closing ceremony of the fun filled 4 days.

- **Plantation drive 10th April 2022**

On April 10, 2022, the Environment, Ecology, and Health club of Jaypee University of Information Technology, Waknaghat, organized a Tree Plantation programme that began at 10:30 a.m. The Vice-Chancellor Prof. (Dr.) Rajendra Kumar Sharma, Dr. Amit Shrivastava (JYC Faculty Incharge), Dr. Naveen Jaglan and Dr. Saurav, (Eco Club Faculty Coordinators), along with Dr. Jitendra Vashisht were present. Pankaj Kumar (Ecology Club student Coordinator) was present along with a team of 35 students to support the Tree Plantation Drive. The faculty members showed the students how to properly plant a sapling. Students and teachers began planting saplings one by one.

Around 20 saplings of three different species were planted to raise awareness about the importance of tree conservation. Callistemon (Bottle brush), Sapindus Mukorossi (Reetha), and Grevillea Robusta (Silver Oak) were among them. While they're all lovely to look at, their significance extends far beyond that. Trees have enormous value and function, and their continued existence is critical to our survival.

- **Dhun 15th April 2022**

The Theatre and Music Club of Jaypee University of Information and Technology held their flagship event "DHUN - the musical night of JUIT" at Dhyan Kaksh on April 15, 2022. Some of the faculty members whose presence made the evening even more delightful were Dr. Amit Shrivastava, Dr. Rakesh Kumar Bajaj, Dr. Rahul Shrivastava, Dr. Gopal Singh Bisht, Dr. Vikas Baghel and Dr. Neena Jindal.

This event was organized by the combined efforts of the club coordinators Pranjal Bansal, Jeet and Mrinal Sharma and the entire team of the club. The musical performances enticed students from all the years. The throbbing atmosphere and foot-stomping music set the tone

for the occasion. The excitement came to a joyful crescendo as musicians took center stage. All the performances were so wonderful that the students couldn't help but sing along to them. At the event, there were a total of 18 performances. All the performances were vivid, ranging from retro to contemporary music. The melodies were sung by students from all the years, including Bhutanese students.

The students were left wanting more after the two-hour programme. The evening came to a close with a vote of thanks to all of the students and professors who attended the event and made it a success.

- **MasterChef 16th April 2022**

On the 16th of April 2022, students from Jaypee University of Information and Technology, Waknaghat, donned their 'Chef Caps' to showcase their culinary skills in 'MasterChef-2022,' the Flagship event of JYC's Environment Ecology and Health Club, organized on the university's Basketball Court. All the teams participated in the event with full zeal and enthusiasm, serving out nutritious yet delightful treats. All the food on display was visually appealing and was prepared in an artistic and aesthetic manner. The dishes were rated on their presentation and flavor, by a panel of distinguished judges consisting of Mrs. Anupama Sharma, Mrs. Vibha Bassi, Mrs. Mamta Gupta and Mrs. Sarika Sahay. The judges were overwhelmed by the contestants' efforts, and the results were announced amidst fierce rivalry. Team Elite bagged the first place, serving Paneer, Missi Roti, and Turkish delight, closely followed by team Tongue Twisters, which took second place for serving Pink sauce pasta, pizza, cake, and mocktail and finally Team Lababdar Chefs were placed third after serving Paneer Lababdar, Lacha Paratha, Salad, Raita, and Mojito.

Pankaj Kumar (Student Coordinator Environment Ecology and Health Club), along with Dr. Sourav and Dr. Naveen Jaglan (Faculty Coordinators), worked together to make the event a success. Aditya Saxena, (President JYC), also took part in the competition along with his team and they prepared Pink Sauce Pasta, Country Special Pizza, Chocolate truffle Delight and Cranberry cooler to the judges.

The event not only gave the students a platform to express their creativity, but it also allowed them to discover their hidden talents.

- **Alfaaz (Literary Fest) 23th - 24th April 2022**

ALFAAZ, the annual literary fest of JUIT, marked its beginning as the inauguration ceremony of the fest which was organized by the Literary and Debating Club of Jaypee University of Information Technology on 23rd April 2022.

To start off the festival, lamp lighting was done in the presence of the Vice Chancellor (Prof.) Dr. Rajendra Kumar Sharma, Registrar Major General Rakesh Bassi, JYC faculty incharge Dr. Amit Srivastava, faculty coordinators of Literary and Debating club Ms. Triambaca Gautam and Dr. Ashok Kumar Nadda. The executive board for the Lok Sabha consisting of Mr. Pradyumn Agarwal (Scribe), Mr. Soham Ahuja (Deputy Speaker) and Mr. Aman Yadav (Speaker) was also present for the inauguration ceremony. The first exciting event of the fest was the Youth Parliament where participants were assigned various parliamentary portfolios and discussion was conducted on a pre-decided agenda. Some more events like Open Mic and Abhivyakti were also conducted for participants to showcase their skills and celebrate the festival of literature.



The Fest continued with its events on Sunday 24th April 2022. The JUIT Youth Parliament's Day 2 sessions proceeded with great enthusiasm and heated debates and arguments. Lafz, an open mic for the students to showcase their oratory skills, an extravaganza where the power of poetry, the melody of songs and influence of words were celebrated was also organized by the Literary and Debating Club which acted as the closing ceremony for the annual literary fest of JUIT.

The event was enlightened with the auspicious presence of the Honourable Vice-Chancellor Prof. (Dr.) Rajendra Kumar Sharma, JYC faculty incharge Dr. Amit Shrivastava, and all the faculty members and students of JUIT.

The event featured 8 poetry performances, and also a unique transition poetry performance, and a mime act by Dramatics and Music club. In addition, four melodious musical performances captivated the audience and left them desiring for more. At the conclusion of the ceremony, awards were presented to the participants of the Youth Parliament. The event concluded with a vote of thanks to all students who attended and participated.

- **Le Fiestus 6th - 8th May 2022**

Jaypee University of Information Technology witnessed "Virasat" the cultural night on the first day of Le-Fiestus. The event was enlightened with the auspicious presence of the Honourable Vice-Chancellor Prof. (Dr.) Rajendra Kumar Sharma, Registrar and Dean students Major General Rakesh Bassi, Dean of Academics & Research Prof. (Dr.) Ashok Kumar Gupta, JYC faculty incharge Dr. Amit Srivastava, and all the faculty members and students of JUIT. To mark the beginning of Virasat, the honourable Vice-chancellor lighted the lamp, alongwith faculty incharge of JYC Dr. Amit Srivastava, faculty co-ordinator of Cultural and Dance club Dr. Ruchi Verma, and the President of JYC, Aditya Saxena. The audience witnessed several delightful dances including performances by F-society, DNR, UBC and the Naati group- Pakke Pahadiye. A glamorous ramp walk held the sight of the audience, as captivating lifts were performed during the walks. To keep the audience entertained a musical performance was performed by the band of our college. To conclude the day a bollywood DJ was organised and everyone enjoyed the night.

Later on day 2 of the Annual Fest of our college, there was a celebration all through the campus, as students participated in various activities organised throughout the campus. In the afternoon, the vibrations spread from the stage to the entire campus as War of Bands was declared open. Following was the night Mad-Mix, filled with jam-packed performances of Mayank and his band Madhyam. Not only this, the night wasn't over, as DJ Antara performed live for the electronic music night.

Soon came the final day of the 3-day annual fest. The morning activities from day 2 continued, and winners were decided under each of them. In the afternoon prize distribution ceremony was organised as everyone received appreciation for their showcase of talent and skills. It was followed by felicitation of the past council of JYC and then the current JYC council by the honourable Vice-chancellor. The ending of the fest was marked by the night "Infinity", which started with a thank you note by the faculty incharge of JYC, Dr. Amit Srivastava. The night was filled with a stand-up comedy act by a popular comedian, Nishant Suri and the night finally concluded with a stunning performance of the main star of the fest, Maninder Buttar.

The fest concluded with a message of exploring infinity, and keeping the audience waiting for the next year, waiting for the vibrant days of the annual fest.

## **TRAINING & PLACEMENT**

Training and Placement (T&P) is an important activity of the University. T&P cell is mainly responsible for arranging practical training of the Undergraduate students to meet their degree requirement and to facilitate the placements of undergraduate & postgraduates' students in suitable jobs in the Industry and various private & public sector organizations.

To facilitate placement T&P cell invites senior executives of major industries/organizations to give talk to the students at Campus which helps them acquire better knowledge about the organization prior to campus interviews.

The Placement summary for last three years is attached at **Appendix-H**

## **FINANCIAL STATUS**

The Audited Balance Sheet of the FY 2021-22 is attached as **Appendix-I**.

**GOVERNING COUNCIL****1. Pro-Chancellor**

Shri Manoj Gaur  
Executive Chairman  
Jaiprakash Associates Ltd.

Chairman

**2. Two Members of Trust nominated by the Pro-Chancellor**

a) Shri Sunil Sharma  
Executive Vice Chairman  
Jaiprakash Associates Ltd.

Member

b) Shri Sunny Gaur  
Managing Director (Cement)  
Jaiprakash Associates Ltd.

Member

**3. Two Representatives of the Collaborating Universities**

a) Prof William Webster  
Ex-Acting Vice Chancellor (Budget & Finance)  
University of California Berkeley, USA

Member

b) Prof. Sartaj Sahni  
Distinguished Professor  
University of Florida at Gainesville, USA

Member

**4. Three Distinguished Academicians/Professionals nominated by the Chancellor in consultation with the Pro-Chancellor**

a) Prof. Onkar Singh  
Professor  
Mechanical Engineering Department  
HBTI  
Kanpur UP - 208002

Member

b) Prof. P.K. Jain  
Director  
IIIT BHU  
Varanasi UP

Member

c) Prof. Manoj Arora  
Vice-Chancellor  
BML Munjal University  
Gurgaon  
Haryana

Member

5. **Two Experts Representing other Disciplines such as Finance, Law and Management nominated by the Pro-Chancellor**
  - a) Sh. S.S. Mittal  
Advocate, Shimla Member
  - b) Sh. Pankaj Gaur  
Jt. Managing Director (Construction)  
Jaiprakash Associates Ltd. Member
6. **Vice Chancellor of the University**  
Prof. (Dr.) Rajendra Kumar Sharma Member
7. **One Head of Another Institute/Laboratory of the Trust**  
Prof. S.C. Saxena  
Pro-Chancellor, JIIT, Noida Member
8. **Two Deans of the University by Rotation**
  - a) Prof. Ashok Kumar Gupta  
Dean (Academics & Research)  
JUIT, Wagnaghat Member
  - b) Vacant
9. **Three Secretaries of Government of Himachal Pradesh**
  - a) Secretary (IT), Govt. of HP Member
  - b) Secretary (Education), Govt. of HP Member
  - c) Secretary (Technical Education), Govt. of HP Member
10. **Three Representatives of the Industry Nominated by the Pro-Chancellor**
  - a) Sh. Alok Gaur  
Head, HR Department  
Jaiprakash Associates Ltd. Member
  - b) Sh. C.S. Verma  
Former Chairman  
Steel Authority of India  
4086, Pocket C4, Vasant Villas, Vasant Kunj,  
New Delhi – 110070 Member

- c) Sh. B. Prasada Rao  
Former Chairman & Managing Director, BHEL  
699, Mahavir Prasad Block  
Asian Games Village Complex  
New Delhi - 110049

Member

11. **Non-Member Secretary**  
Maj Gen Rakesh Bassi, SM (Retd)  
Registrar & Dean of Students, JUIT

**EXECUTIVE COUNCIL**

- |           |   |                 |
|-----------|---|-----------------|
| <b>1.</b> | <b>The Vice Chancellor of the University</b>  | <b>Chairman</b> |
|           | Prof. (Dr.) Rajendra Kumar Sharma   |                 |
| <b>2.</b> | <b>Two Members of Governing Council nominated by the Pro-Chancellor</b>                           |                 |
|           | a) Sh. Sunil Sharma<br>Executive Vice Chairman<br>Jaiprakash Associates Ltd.                      | Member          |
|           | b) Sh. S.S. Mittal<br>Advocate<br>Shimla  | Member          |
| <b>3.</b> | <b>One Dean of the University</b>   |                 |
|           | Prof. Ashok Kumar Gupta<br>Dean (Academics& Research)   | Member          |
| <b>4.</b> | <b>One Academician of repute nominated by the Pro-Chancellor</b>                                  |                 |
|           | Prof. S.C. Saxena<br>Pro-Chancellor<br>Jaypee Institute of Information Technology (JIIT)<br>Noida | Member          |
| <b>5.</b> | <b>Non- Member Secretary</b>  |                 |
|           | Maj Gen Rakesh Bassi, SM (Retd)<br>Registrar & Dean of Students                                   |                 |

**FINANCE COMMITTEE**

- |    |   |                 |
|----|---|-----------------|
| 1. | <b>The Vice Chancellor of the University</b>            | <b>Chairman</b> |
|    | Prof. (Dr.) Rajendra Kumar Sharma                       |                 |
| 2. | <b>One Nominee of the Pro-Chancellor</b>                |                 |
|    | Sh. Sunil Sharma  | Member          |
|    | Executive Vice Chairman                                 |                 |
|    | Jaiprakash Associates Ltd                               |                 |
| 3. | <b><u>One Nominee of the Governing Council</u></b>      |                 |
|    | Maj Gen Rakesh Bassi, SM (Retd)                         | Member          |
|    | Registrar & Dean of Students                            |                 |
|    | JUIT Wagnaghat  |                 |
| 4. | <b>One Dean (by rotation) on the basis of Seniority</b> |                 |
|    | Prof. Ashok Kumar Gupta                                 | Member          |
|    | Dean (Academics& Research)                              |                 |
| 5. | <b>Non Member Secretary</b>                             |                 |
|    | The Finance Officer of the University                   |                 |
|    | Sh. Hemant Vyas   |                 |
|    | Chief Finance Officer                                   |                 |

**ACADEMIC COUNCIL OF THE UNIVERSITY**

**1. The Vice Chancellor of the University - Chairman**

Prof. (Dr.) Rajendra Kumar Sharma

**2. Two Professors other than Heads of Departments by Rotation and by Seniority**

a) Prof. (Dr.) Sunil Kumar Khah – Physics & Material Science

b) Prof. (Dr.) Vineet Sharma - Physics & Materials Science

**3. Two Distinguished Academicians to be nominated by Pro- Chancellor**

a)	Dr. Satish Kumar Ex-Director NIT Kurukshetra	Member
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b)	Prof. Lalit Kumar Awasthi Director, NIT, Srinagar, Uttarakhand	Member,
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**4. Two Industry Professionals to be nominated by the Pro-Chancellor**

a)	Sh. Sunil Sharma Executive Vice Chairman Jaiprakash Associates Ltd.	Member
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b)	Lt. Gen Ravindra Mohan Chadha, PVSM, AVSM (Retd) Director Jaiprakash Power Ventures Ltd.	Member
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**5. One Member from amongst the Heads of other Institution of the Trust**

Prof. S.C. Saxena  
Vice Chancellor  
Jaypee Institute of Information Technology (JIIT), Noida

**6. The Deans of all Faculty of the University**

a) Prof. Ashok Kumar Gupta  
Dean (Academics & Research)

b) Vacant



## **7. Heads of the Departments/Centres of the University**

- a) Prof. (Dr.) P.B. Barman, HOD, Department of Physics & Materials Science
- b) Prof. (Dr.) Sudhir Kumar, HOD, Department of BT&BI
- c) Prof. (Dr.) Ashish Kumar, HOD, Department of Civil Engineering
- d) Prof. (Dr.) Vivek Sehgal, HOD, Department of CSE/IT
- e) Prof. (Dr.) Rajiv Kumar, HOD, Department of ECE
- f) Prof. (Dr.) Rakesh Kumar Bajaj, HOD, Department of Mathematics
- g) Dr. Amit Srivastava, HOD, Department of HSS

## **8. Non-Member Secretary**

Maj Gen Rakesh Bassi, SM (Retd)  
Registrar & Dean of Students

**DETAILS OF LAND**

<b>JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY</b>				
<b>Waknaghat Solan (H.P.)</b>				
<b>Summary (Plinth Area )</b>			<b>17.04.2021</b>	
<b>Sl. No.</b>	<b>Particulars</b>	<b>Area (In sqm)</b>	<b>Ground Coverage Area (in sqm)</b>	<b>Total No. of Floor</b>
<b>1</b>	<b>Institution and administrative area</b>			
	Academic Block -3 Level	442.63	4846.80	1 Floor
	Academic Block -2 Level	798.98		1 Floor
	Academic Block -1 Level	1298.53		1 Floor
	Academic Block 0 Level	2510.19		1 Floor
	Academic Block +1 Level	3093.40		1 Floor
	Academic Block +2 Level	2868.87		1 Floor
	Academic Block +3 Level	2307.04		1 Floor
	Academic Block +4 Level	1086.34		1 Floor
	<b>Total</b>	<b>14405.98</b>		
	Auditorium & Stage	1324.50		1 Floor
	Animal House Lab	256.00	128.00	2 Floor
	Civil Lab	614.23	153.71	3 Floor
	Civil Deptt. administrative Area	723.75	241.25	3 Floor
	<b>G.TOTAL</b>	<b>17324.46</b>		
<b>2</b>	<b>Faculty housing</b>			
	Faculty Block A Type	1787.97	442.93	9
	Faculty Block B Type	0		
	B01	1231.43	293.68	8+Mumty
	B02	1353.16	293.68	8+Mumty
	B03	1231.06	293.68	8+Mumty
	B04	1353.16	293.68	8+Mumty
	Faculty Block C Type	0		
	C01	1073.64	259.01	8+Mumty
	C02	1079.76	259.01	8+Mumty
	C03	1015.07	259.01	7+Mumty
	Guest House	1427.59	774.16	4 Floor
	<b>Total</b>	<b>11552.84</b>		
	E Type Faculty ( A Block)		246.28	

	Ground Floor	66.34		
	First Floor	66.34		
	Typical Floor	469.20		4 Floor
	E Type Faculty ( B Block)			
	Ground Floor	66.40		1 Floor
	Typical Floor	357.60		3 Floor
	<b>Total Of E Faculty</b>	<b>1025.88</b>		
	D Type Faculty (A Block )			10 Floor
	Ground Floor	67.56		1 Floor
	First Floor	80.83		1 Floor
	Typical Floor	900.8		8 + Mumty
	D Type Faculty (B Block )			
	Ground Floor	55		
	First Floor	77.6		
	Typical Floor	900.8		8 + Mumty
	<b>Total</b>	<b>2082.59</b>		
	<b>TOTAL</b>	<b>14661.31</b>		
			215.14	
<b>3</b>	<b>Student housing (HOSTEL)</b>			
	H-1	1209.04	132.62	8+Mumty
	H-2	1159.24	182.80	7+Mumty
	H-3	624.93	137.17	5+Mumty
	H-4	1326.84	192.37	8+Mumty
	H-5	2118.40	184.94	12+Mumty
	H-6	1152.61	192.37	8
	H-7	1044.23	192.37	7+Mumty
	H-8	916.85	192.37	6+Mumty
	H-9	911.71	183.05	6+Mumty
	H-10	927.88	183.05	6+Mumty
	H-11	1321.16	192.37	8+Mumty
	Girls Hostel 12A	2190.70	192.37	10+Mumty
	Girls Hostel 12B	1718.85	192.37	9+Mumty
	Girls Hostel 12C	1909.04	192.37	9+Mumty
	Girls Hostel 12D	1648.14	192.37	9+Mumty
	H-14A	865.69	192.37	9
	H-14B	1302.54	192.37	8+Mumty
	H-14C	2253.75	192.37	11

	H-14D	1859.50	192.37	10+Mumty
	H-15A	1832.76	192.37	11
	H-15B	1361.51	192.37	8+Mumty
	H-15C	1715.35	192.37	10
	H-15D	1510.54	192.37	8+Mumty
	Student Lounge	132.63	132.62	2
	<b>TOTAL</b>	<b>33013.89</b>		
<b>4</b>	<b>Dormitory (For supporting staff/Worker)</b>			
	Worker Dormitory-1		350.00	
	Basement	288.23		1 Floor
	Ground Floor	574.11		1 Floor
	First Floor	405.03		1 Floor
	Second Floor	350.17		1 Floor
	Total	<b>1617.54</b>		
	Worker Dormitory-2 (F Block)	673.20	241.63	4 Floor
	<b>TOTAL</b>	<b>2290.74</b>		
<b>5</b>	<b>Miscellaneous Structures</b>			
	Annapurna	2016.64		1Floor
	Uploading Bay (Annapurna)	189.14	90.14	2 Floor
	Telephone Exchange	913.31	216.91	5 Floor
	ESS	1999.76	724.90	5 Floor
	Plant Room / Green Room	591.46	194.98	1 Floor
	Mandir	281.66	281.59	1 Floor
	Dispensary	251.96	90.61	3 Floor
	S.T.P	92.55	92.55	1 Floor
	Store	326.43	326.43	1 Floor
	Security Room	17.50	17.50	1 Floor
	Garbage Room	64.28	32.14	2 Floor
	Laundry	193.63	193.63	1 Floor
	<b>TOTAL</b>	<b>6938.32</b>		
	<b>G Total</b>	<b>74228.71</b>	<b>16259.58</b>	

**TOTAL PLOT AREA = 114.10 BIGHA**

**TOTAL PLOT AREA IN SQMTR. 114.10 X 753 = 85917.3 SQMTR.**

**DETAILS OF TEACHING STAFF**

<b>JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY</b>			
<b>Computer Science &amp; Engineering and Information Technology</b>			
1	Dr. Vivek Kumar Sehgal	Professor& HOD	PhD
2	Dr. Pradeep Kumar Gupta	Associate Professor	PhD
3	Dr. Pardeep Kumar	Associate Professor	PhD
4	Dr. Rajni Mohana	Associate Professor	PhD
5	Dr. Ravindara Bhatt	Associate Professor	PhD
6	Dr. Yugal Kumar	Associate Professor	PhD
7	Dr. Ruchi Verma	Asst. Professor	PhD
8	Dr. Ekta Gandotra	Asst. Professor	PhD
9	Dr. Amit Kumar	Asst. Professor	PhD
10	Dr. Hari Singh	Asst. Professor	PhD
11	Dr. Jagpreet	Asst. Professor	PhD
12	Dr. Amol Vasudeva	Asst. Professor	PhD
13	Dr. Himanshu Jindal	Asst. Professor	PhD
14	Dr. Rakesh Kanji	Asst. Professor	PhD
15	Dr. Monika Bharti	Asst. Professor	PhD
16	Dr. Aman Sharma	Asst. Professor	PhD
17	Dr. Deepak Gupta	Asst. Professor	PhD
18	Dr. Shubham Goel	Asst. Professor	PhD
19	Dr. Abhilasha Sharma	Asst. Professor	PhD
20	Dr. Sahil Sharma	Asst. Professor	PhD
21	Dr. Avani Vyas	Asst. Professor	PhD
22	Dr. Nancy Singla	Asst. Professor	PhD
23	Mr. Arvind Kumar	Asst. Professor	M. Tech
24	Mr. Prateek	Asst. Professor	M. Tech

25	Mr. Surjeet Singh	Asst. Professor	M. Tech
26	Dr. Vipal Kumar Sharma	Asst. Professor	PhD
27	Dr. Pankaj Dhiman	Asst. Professor	PhD
28	Ms. Diksha Hooda	Asst. Professor	M. Tech
29	Mr. Nishant Sharma	Asst. Professor	M. Tech
30	Ms. Aditi Sharma	Asst. Professor	M. Tech
31	Ms. Simran Setia	Asst. Professor	M. Tech
32	Mr. Praveen Modi	Asst. Professor	M. Tech

<b>Electronics &amp; Communication Engineering</b>			
1	Dr. Rajiv Kumar	Professor & HOD	PhD
2	Dr. Shruti Jain	Professor	PhD
3	Dr. Naveen Jaglan	Associate Professor	PhD
4	Dr. Harsh Sohal	Associate Professor	PhD
5	Dr. Emjee Puthooran	Associate Professor	PhD
6	Dr. Nafis Uddin Khan	Asst. Professor	PhD
7	Dr. Shweta Pandit	Asst. Professor	PhD
8	Dr. Sunil Datt Sharma	Asst. Professor	PhD
9	Dr. Vikas Baghel	Asst. Professor	PhD
10	Dr. Salman Raju Talluri	Asst. Professor	PhD
11	Dr. Nishant Jain	Asst. Professor	PhD
12	Dr. Alok Kumar	Asst. Professor	PhD
13	Ms. Pragya Gupta	Asst. Professor	M. Tech
14	Dr. Pardeep Garg	Asst. Professor	PhD
15	Mr. Munish Sood	Asst. Professor	M. Tech
16	Mr. Anuj Kumar Maurya	Asst. Professor	M. Tech

<b>Biotechnology and Bioinformatics</b>			
1	Dr. Sudhir Kumar	Professor	PhD
2	Dr. Anil Kant	Associate Professor	PhD
3	Dr. Hemant Sood	Associate Professor	PhD
4	Dr. Rahul Shrivastava	Associate Professor	PhD
5	Dr. Gopal Singh Bisht	Associate Professor	PhD
6	Dr. Tiratha Raj Singh	Associate Professor	PhD
7	Dr. Jata Shankar	Associate Professor	PhD
8	Dr. Poonam Sharma	Associate Professor	PhD
9	Dr. Udayabanu M	Associate Professor	PhD
10	Dr. Garlapati Vijay Kumar	Associate Professor	PhD
11	Dr. Jitendraa Vashistt	Associate Professor	PhD
12	Dr. Saurabh Bansal	Asst. Professor	PhD
13	Dr. Ashok Kumar Nadda	Asst. Professor	PhD
14	Dr. Abhishek Chaudhary	Asst. Professor	PhD
15	Dr. Raj Kumar	Asst. Professor	PhD
15	Dr. Shikha Mittal	Asst. Professor	PhD

<b>Civil Engineering</b>			
1	Dr. Ashok Kumar Gupta	Professor	PhD
2	Dr. Ashish Kumar	Professor	PhD
3	Dr. Amardeep	Asst. Professor	PhD
4	Dr. Saurabh Rawat	Asst. Professor	PhD
5	Dr. Saurav	Asst. Professor	PhD
6	Dr. Rishi Rana	Asst. Professor	PhD
7	Dr. Tanmay Gupta	Asst. Professor	PhD
8	Dr. Sugandha Singh	Asst. Professor	PhD
9	Mr. Chandra Pal Gautam	Asst. Professor	M. Tech
10	Mr. Niraj Singh Parihar	Asst. Professor	M. Tech

11	Mr. Kaushal Kumar	Asst. Professor	M. Tech
12	Mr. Akash Bhardwaj	Asst. Professor	M. Tech
<b>Humanities and Social Sciences</b>			
1	Dr. Amit Srivastava	Associate Professor& HOD	PhD
2	Dr. Anupriya Kaur	Associate Professor	PhD
3	Dr. Tanu Sharma	Associate Professor	PhD
4	Dr. Papiya Lahiri	Asst. Professor	PhD
5	Mrs. Triambica Gautam	Asst. Professor	MBA
6	Dr. Neena Jindal	Asst. Professor	PhD
7	Dr. Deler Singh	Asst. Professor	PhD
<b>Mathematics</b>			
1	Dr. Rakesh Kumar Bajaj	Professor& HOD	PhD
2	Dr. Karanjeet Singh	Professor	PhD
3	Dr. R S Raja Durai	Associate Professor	PhD
4	Dr. Bhupendra Kumar Pathak	Asst. Professor	PhD
5	Dr. Neel Kanth	Asst. Professor	PhD
6	Dr. Pradeep Kumar Pandey	Asst. Professor	PhD
7	Dr. Saurabh Srivastava	Asst. Professor	PhD
8	Dr. Mandeep Singh	Asst. Professor	PhD
<b>Physics and Materials Science</b>			
1	Dr. Partha Bir Barman	Professor & HOD	PhD
2	Dr. Sunil Kumar Khah	Professor	PhD
3	Dr. Vineet Sharma	Professor	PhD
4	Dr. Ragini Raj Singh	Associate Professor	PhD
5	Dr. Surajit Kumar Hazra	Associate Professor	PhD
6	Dr. Sanjiv Kumar Tiwari	Asst. Professor	PhD
7	Dr. Santu Baidya	Asst. Professor	PhD



**RESULTS OF PAST FOUR YEARS**

The University was set up in the year 2002 and fourteen batches have graduated, the results of the last four batches are being furnished below:

**RESULT OF THE BATCH 2015-2019 – BTECH**

<b><u>Branch</u></b>	<b><u>No. of Students</u></b>	<b><u>No. of students Passed</u></b>	<b><u>Pass%</u></b>
ECE	97	87	89.69%
CSE	219	214	97.71%
IT	26	25	96.15%
BI	8	8	100%
BT	43	40	93.02%
CE	89	69	77.52%

**RESULT OF THE BATCH 2016-2020 – BTECH**

ECE	99	99	100%
CSE	175	174	99.4%
IT	25	25	100%
BI	15	15	100%
BT	33	33	100%
CE	75	75	100%

**RESUSLTS BTECH 2017-21 – BTECH**

CSE	166	161	96.99%
IT	28	28	100%
ECE	66	63	95.45
CE	76	66	86.84%
BT	3	33	100%
BI	18	18	100%

**RESUSLTS BTECH 2018-22 – BTECH**

CSE	222	219	98.64%
IT	25	24	96%
ECE	21	20	95.23%
CE	53	49	92.45%
BT	40	39	97.5%
BI	6	6	100%

**RESULTS OF BATCH 2018-2020 – MTECH**

CSE	01	01	100%
Construction Management	04	03	75%
Structural Engineering	07	07	100%

**RESULTS OF BATCH 2019-2021 – MTECH**

Construction Management	05	05	100%
Structural Engineering	07	07	100%
CSE	03	03	100%

**RESULTS OF BATCH 2020-2022 – MTECH**

Construction Management	03	03	100%
Structural Engineering	05	05	100%

**RESULTS OF BATCH 2019-2021 – MSc**

MSc	22	22	100%
Integrated	03	03	100%

**RESULTS OF BATCH 2020-2022 – MSc**

MSc	23	19	82.6%
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**TRAINING & PLACEMENT DATA****For 2019 Batch**

- Highest Salary – 10.00 Lacs by Byju's
- 2nd Highest Salary – 9 Lacs by Blogvolt

<b>PLACEMENT STATUS : JUIT Solan 2015-19 as on 28/June/2022</b>					
<b>Branch</b>	<b>Total Eligible Participating Students</b>	<b>No. of Absolute Offers</b>	<b>% of Absolute Offers</b>	<b>No. of Total Offers</b>	<b>% of Total Offers</b>
<b>CSE</b>	160	150	94%	229	143%
<b>ECE</b>	65	65	100%	76	117%
<b>IT</b>	22	21	95%	32	145%
<b>BT/BI</b>	26	24	92%	27	104%
<b>CIVIL</b>	46	19	41%	23	50%
<b>Dual BT/BI</b>	4	3	75%	3	75%
<b>Total</b>	<b>323</b>	<b>282</b>	<b>86%</b>	<b>390</b>	<b>121%</b>

**For 2020 Batch**

- Highest Salary – 28.00 Lacs by Amazon
- 2nd Highest Salary – 13 Lacs by Zscaler

<b>PLACEMENT STATUS : JUIT Solan 2016-20 as on 28/July/2022</b>					
<b>Branch</b>	<b>Total Eligible Participating Students</b>	<b>No. of Absolute Offers</b>	<b>% of Absolute Offers</b>	<b>No. of Total Offers</b>	<b>% of Total Offers</b>
<b>CSE</b>	143	131	92%	239	167%
<b>ECE</b>	74	73	99%	106	144%
<b>IT</b>	22	21	95%	38	173%
<b>BT/BI</b>	17	12	71%	12	71%
<b>CIVIL</b>	27	11	41%	12	44%
<b>Total</b>	<b>283</b>	<b>248</b>	<b>88%</b>	<b>407</b>	<b>144%</b>

**For 2021 Batch**

- Highest Salary –30 Lacs by Amazon
- 2nd Highest Salary – 17.5 Lacs by Amazon (Non Tech)

<b>PLACEMENT STATUS : JUIT Solan 2017-21 as on 28/June/2022</b>					
<b>Branch</b>	<b>Total Eligible Participating Students</b>	<b>No. of Absolute Offers</b>	<b>% of Absolute Offers</b>	<b>No. of Total Offers</b>	<b>% of Total Offers</b>
<b>CSE</b>	124	124	100%	214	173%
<b>ECE</b>	45	45	100%	59	131%
<b>IT</b>	26	24	92%	41	158%
<b>BT/BI</b>	19	15	79%	17	89%
<b>CIVIL</b>	15	8	53%	9	60%
<b>Total</b>	<b>229</b>	<b>216</b>	<b>94%</b>	<b>340</b>	<b>148%</b>

**For 2022 Batch**

<b>On Campus</b>	<b>Off Campus</b>
Highest Salary –32 Lacs by Amazon	Highest Salary –50 Lacs by Microsoft
2nd Highest Salary – 31.5 Lacs by Amazon	2nd Highest Salary – 45 Lacs by Adobe

<b>PLACEMENT STATUS : JUIT Solan 2018-22 as on 28/Jun/2022</b>					
<b>Branch</b>	<b>Total Eligible participating Students</b>	<b>No. of Absolute Offers</b>	<b>% of Absolute Offers</b>	<b>No. of Total Offers</b>	<b>% of Total Offers</b>
<b>CSE</b>	201	193	96%	381	190%
<b>ECE</b>	16	13	81%	22	138%
<b>IT</b>	23	23	100%	43	187%
<b>BT/BI</b>	33	26	79%	31	94%
<b>CIVIL</b>	28	17	61%	18	64%
<b>Total</b>	<b>301</b>	<b>272</b>	<b>90%</b>	<b>495</b>	<b>164%</b>

**BALANCE SHEET FOR  
THE  
FINANCIAL YEAR 2021-22**

INDEPENDENT AUDITORS' REPORT

TO THE MEMBERS OF THE GOVERNING BODY  
JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY  
WAKNAGHAT, SOLAN DISTRICT

**REPORT ON THE FINANCIAL STATEMENTS**

WE HAVE AUDITED THE ATTACHED BALANCE SHEET OF JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY (HERE IN AFTER REFERRED AS UNIVERSITY) AS AT 31<sup>ST</sup> MARCH 2022 AND THE ANNEXED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED, AND A SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND OTHER EXPLANATORY INFORMATION.

***MANAGEMENT'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS***

MANAGEMENT IS RESPONSIBLE FOR THE PREPARATION OF THESE FINANCIAL STATEMENTS THAT GIVE A TRUE AND FAIR VIEW OF THE FINANCIAL POSITION AND FINANCIAL PERFORMANCE OF THE UNIVERSITY IN ACCORDANCE WITH THE INCOME TAX ACT 1961 ("THE ACT"). THIS RESPONSIBILITY ALSO INCLUDES MAINTENANCE OF ADEQUATE ACCOUNTING RECORDS IN ACCORDANCE WITH THE PROVISIONS OF THE ACT FOR SAFEGUARDING THE ASSETS OF THE UNIVERSITY AND FOR PREVENTING AND DETECTING FRAUDS AND OTHER IRREGULARITIES; SELECTION AND APPLICATION OF APPROPRIATE ACCOUNTING POLICIES; MAKING JUDGMENTS IN THE ESTIMATES THAT ARE REASONABLE AND PRUDENT; AND DESIGN, IMPLEMENTATION AND MAINTENANCE OF ADEQUATE INTERNAL FINANCIAL CONTROLS, THAT WERE OPERATING EFFECTIVELY FOR ENSURING THE ACCURACY AND COMPLETENESS OF THE ACCOUNTING RECORDS, RELEVANT TO THE PREPARATION AND PRESENTATION OF THE FINANCIAL STATEMENTS THAT GIVE A TRUE AND FAIR VIEW AND ARE FREE FROM MATERIAL MISSTATEMENT, WHETHER DUE TO FRAUD OR ERROR.

**AUDITOR'S RESPONSIBILITY**

OUR RESPONSIBILITY IS TO EXPRESS AN OPINION ON THESE FINANCIAL STATEMENTS BASED ON OUR AUDIT. WE CONDUCTED OUR AUDIT IN ACCORDANCE WITH THE STANDARDS ON AUDITING ISSUED BY THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA. THOSE STANDARDS REQUIRE THAT WE COMPLY WITH ETHICAL REQUIREMENTS AND PLAN AND PERFORM THE AUDIT



TO OBTAIN REASONABLE ASSURANCE ABOUT WHETHER THE FINANCIAL STATEMENTS ARE FREE FROM MATERIAL MISSTATEMENT.

AN AUDIT INVOLVES PERFORMING PROCEDURES TO OBTAIN AUDIT EVIDENCE ABOUT THE AMOUNTS AND DISCLOSURES IN THE FINANCIAL STATEMENTS. THE PROCEDURES SELECTED DEPEND ON THE AUDITOR'S JUDGMENT, INCLUDING THE ASSESSMENT OF THE RISKS OF MATERIAL MISSTATEMENT OF THE FINANCIAL STATEMENTS, WHETHER DUE TO FRAUD OR ERROR. IN MAKING THOSE RISK ASSESSMENTS, THE AUDITOR CONSIDERS INTERNAL CONTROL RELEVANT TO THE UNIVERSITY PREPARATION AND FAIR PRESENTATION OF THE FINANCIAL STATEMENTS IN ORDER TO DESIGN AUDIT PROCEDURES THAT ARE APPROPRIATE IN THE CIRCUMSTANCES, BUT NOT FOR THE PURPOSE OF EXPRESSING AN OPINION ON THE EFFECTIVENESS OF THE ENTITY'S INTERNAL CONTROL. AN AUDIT ALSO INCLUDES EVALUATING THE APPROPRIATENESS OF ACCOUNTING POLICIES USED AND THE REASONABLENESS OF THE ACCOUNTING ESTIMATES MADE BY MANAGEMENT, AS WELL AS EVALUATING THE OVERALL PRESENTATION OF THE FINANCIAL STATEMENTS.

WE BELIEVE THAT THE AUDIT EVIDENCE WE HAVE OBTAINED IS SUFFICIENT AND APPROPRIATE TO PROVIDE A BASIS FOR OUR AUDIT OPINION.

#### OPINION

A. IN OUR OPINION AND TO THE BEST OF OUR INFORMATION AND ACCORDING TO THE EXPLANATIONS GIVEN TO US, THE SAID ACCOUNTS WITH SIGNIFICANT ACCOUNTING POLICIES AND OTHER NOTES THEREON GIVE A TRUE AND FAIR VIEW:

- (i) IN THE CASE OF BALANCE SHEET, OF THE STATE OF AFFAIRS OF THE UNIVERSITY AS AT 31<sup>ST</sup> MARCH 2022; AND
- (ii) IN THE CASE OF INCOME & EXPENDITURE ACCOUNT, OF THE DEFICIT FOR THE YEAR ENDED ON THAT DATE.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS



- B. WE HAVE OBTAINED ALL THE INFORMATION AND EXPLANATIONS, WHICH TO THE BEST OF OUR KNOWLEDGE AND BELIEF WERE NECESSARY FOR THE PURPOSE OF OUR AUDIT.
- C. IN OUR OPINION PROPER BOOKS OF ACCOUNT AS REQUIRED BY LAW HAVE BEEN KEPT BY THE UNIVERSITY SO FAR AS APPEARS FROM OUR EXAMINATION OF THOSE BOOKS;
- D. THE BALANCE SHEET AND STATEMENT OF INCOME & EXPENDITURE ACCOUNT DEALT WITH BY THIS REPORT ARE IN AGREEMENT WITH THE BOOKS OF ACCOUNT;
- E. IN OUR OPINION THE BALANCE SHEET AND INCOME & EXPENDITURE ACCOUNT DEALT WITH BY THIS REPORT COMPLY WITH THE APPLICABLE ACCOUNTING STANDARDS SUBJECT TO OUR COMMENTS IN SIGNIFICANT ACCOUNTING POLICIES AND NOTES ANNEXED TO AND FORMING PART OF THE ACCOUNTS.

FOR AND ON BEHALF OF  
DASS GUPTA & ASSOCIATES  
CHARTERED ACCOUNTANTS  
REGISTRATION No. 000112N

  
(ASHOK KUMAR JAIN)  
PARTNER  
MEMBERSHIP No. 090563

ICAI UDIN No. 22090563 ASE RZ M9165

DATE: 14.09.2022  
PLACE: NEW DELHI



**Jaypee University of Information Technology**  
**Waknaghat, Distt. Solan (H.P.)**

**Balance Sheet as on 31.03.2022**

Amount (₹) 31.03.2021	LIABILITIES	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021	ASSETS	Amount (₹) 31.03.2022
5,00,00,000	<b>CORPUS FUND</b>	5,00,00,000	71,21,61,919	<b>FIXED ASSETS</b>	72,02,89,881
1,01,55,000	For University	1,01,55,000	81,27,982	Opening Balance	1,10,97,543
6,01,55,000	For Research Promotion (UBSK)	6,01,55,000	-	Addition during the year	71,000
				Disposed off during the current period	
25,74,95,199	<b>GENERAL FUND</b>	22,28,90,457	72,02,89,881	Gross Block	73,13,16,424
(3,46,04,742)	Opening Balance	(6,05,54,455)	53,76,45,222	Less : up to date Depreciation	58,71,38,180
22,28,90,457	Add - Deficit brought from Income & Expenditure A/C	16,23,36,002	18,26,44,659	Net Block	16,41,78,244
	<b>RESEARCH PROJECT'S FUND</b>				
53,62,509	Opening Balance	84,64,405	11,81,220	<b>CAPITAL WORK IN PROGRESS</b>	22,50,185
59,50,424	Add : Received during the year	10,94,488		<b>CURRENT ASSETS, LOANS &amp; ADVANCES</b>	
(26,51,215)	Less : Expenses during the year	(25,55,975)	17,08,00,824	Cash & Bank Balance	17,35,14,321
(1,97,313)	Less : Refund during the year	(2,09,574)	10,45,83,256	Advances and Receivables in Cash or in Kind	10,25,17,028
84,64,405		67,93,344			
	<b>CURRENT LIABILITIES &amp; PROVISIONS</b>				
7,11,33,107	Sundry Creditors	7,69,30,093	49,12,566	Prepaid Expenses	50,60,614
9,45,78,304	Other Liabilities	13,47,87,534	23,83,452	Security Deposits	23,83,452
			80,59,618	Stock-in-Hand	88,32,579
	<b>CAUTION MONEY</b>				
1,62,00,930	Opening Balance	1,73,44,322			
52,60,000	Add : Received during the year	46,55,000			
(41,16,608)	Less : Refund during the year	(42,64,872)			
	(Due for payment during next one year Rs.38,49,500/-)				
1,73,44,322		1,77,34,450			
47,45,65,595	<b>Total Liabilities</b>	45,87,36,423	47,45,65,595	<b>Total Assets</b>	45,87,36,423

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet

For DASS GUPTA & ASSOCIATES  
CHARTERED ACCOUNTANTS  
REG. NO. 0061178  
[ASHOK KUMAR SHARMA]  
PARTNER  
MEMBERSHIP No. 000563  
New Delhi  
PLACE:- New Delhi  
DATE : 14.09.2022  
UDIN:- 22090563ASERZM9165

RAJENDRA KUMAR SHARMA  
VICE CHANCELLOR

MAJ GEN RAKESH BASSI, SM (RETD)  
REGISTRAR

Jaypee University of Information Technology  
Waknaghat, Distt. Solan (H.P.)

Chief Finance Officer  
HERNAT VYAS

**Jaypee University of Information Technology**  
Waknaghat, Distt. Solan, H.P.  
**Income & Expenditure Account for the year ended on 31.03.2022**

Amount (₹) 31.03.2021	EXPENDITURE	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021	INCOME	Amount (₹) 31.03.2022
5,11,36,591	Institutional Expenses	5,78,35,042	30,05,03,937	Collection from Students	33,73,33,078
20,13,77,062	Salary & Allowances	23,26,02,799	86,52,210	Interest received on FDs	57,21,308
5,91,64,865	Students Hostel Expenses	8,56,46,105	19,67,980	Other Income	19,68,063
3,40,50,351	Depreciation	2,94,92,958			
34,57,28,869	Total Expenditure	40,55,76,904			
(3,46,04,742)	Deficit Transferred to General Fund A/C	(6,05,54,455)			
31,11,24,127	TOTAL	34,50,22,449	31,11,24,127	TOTAL	34,50,22,449

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Income & Expenditure Account.  
As per our report of even date attached

For DASS GUPTA & ASSOCIATES  
CHARTERED ACCOUNTANTS  
REG. NO. 000112X

(ASHOK KUMAR GUPTA)  
PARTNER  
MEMBERSHIP NO. 199657  
NEW DELHI

PLACE:- New Delhi  
DATE : 14.09.2022

UDIN- 22090563ASERZM9165



HEMANT VYAS  
CHIEF FINANCE OFFICER

*MAJ GEN RAKESH BASSI (RETD)*

MAJ GEN RAKESH BASSI (RETD)  
REGISTRAR

REGISTRAR,  
Jaypee University of Information Technology  
Waknaghat, Distt. Solan (H.P.)



RAJENDRA KUMAR SHARMA  
VICE CHANCELLOR

SCHEDULE : "A"										Amount: (₹)	
Block of Assets		Rate of Dep	Op. Balance as on 01.04.2021	GROSS BLOCK		Disposed off during the year	As on 31.03.2022	DEPRECIATION		NET BLOCK	
Classification of Assets				Addition during the year				Op. Balance as on 01.04.2021	For the Year	Up to 31.03.2022	As on 31.03.2021
		100 Days or more	Less than 100 Days								
Buildings		10%	14,55,81,037	540	20,610	-	14,55,81,037	3,50,17,139	55,25,350	8,88,43,350	8,57,57,530
Library Books		15%	8,48,01,385	-	-	-	8,48,01,385	5,59,41,551	19,31,059	5,70,27,680	1,35,99,734
Electronic Lab Equipments		15%	2,70,00,220	-	-	-	2,70,00,220	3,05,40,885	5,30,434	1,70,79,430	35,38,224
Bio-Informatics Lab Equipments		15%	2,73,71,505	25,285	-	-	2,73,71,505	2,20,38,000	8,85,264	2,36,07,270	44,33,457
Analysis Lab Equipments		15%	1,14,14,575	1,36,390	-	-	1,14,14,575	85,11,513	3,25,250	98,37,057	27,00,092
Computer Lab Equipments		40%	14,53,00,226	4,85,183	-	-	14,53,00,226	13,60,49,570	71,81,778	13,81,08,259	1,74,31,150
Imported Bio Lab Equipments		15%	3,10,31,000	-	-	-	3,10,31,000	1,95,36,505	3,73,800	1,98,12,087	24,92,015
Imported Electronic Lab Equipments		15%	33,58,810	-	-	-	33,58,810	31,06,143	24,250	30,19,693	1,63,867
Imported Computer Lab Equipments		40%	7,37,191	-	-	-	7,37,191	7,37,192	-	7,37,190	1
Imported Office Equipments		15%	87,605	-	-	-	87,605	70,071	1,366	80,226	9,004
Imported Lab Equipments		15%	1,26,95,095	3,57,640	-	-	1,26,95,095	92,47,610	5,63,459	1,28,15,099	34,38,005
Software-Computer		40%	45,04,280	-	-	-	45,04,280	41,04,004	1,58,076	45,64,470	3,92,585
Software -Math		40%	3,24,250	-	-	-	3,24,250	3,14,614	9,834	3,18,505	5,759
Software-Civil		40%	22,34,478	-	-	-	22,34,478	21,33,858	44,318	21,90,004	1,10,790
Software -Language Lab		40%	17,37,038	-	-	-	17,37,038	16,64,277	28,454	18,05,711	73,711
Software -Biosci Lab		40%	19,46,180	-	-	-	19,46,180	17,23,150	48,048	18,77,282	1,21,700
Software -Electronics Lab		40%	40,22,160	-	-	-	40,22,160	35,24,000	7,70,158	37,47,658	5,57,585
Software -Library		40%	2,73,000	-	-	-	2,73,000	2,69,457	5,017	2,65,424	12,543
Software -Physics Lab		40%	4,35,125	-	-	-	4,35,125	4,09,300	10,340	4,15,482	25,973
Software -PG Lab		40%	4,66,250	-	-	-	4,66,250	4,18,030	19,344	4,30,374	45,360
Office Equipments		15%	2,37,92,575	2,04,673	3,18,160	-	2,43,06,438	1,47,15,315	14,16,632	1,61,26,567	50,67,780
Miscellaneous Assets		15%	53,41,542	75,073	73,995	-	54,21,876	41,79,789	1,08,762	45,29,587	80,72,441
Furniture & Fixtures		10%	5,25,06,003	-	-	-	5,19,08,655	34,11,921	4,12,131	35,24,072	27,47,674
Transportation Equipments		15%	2,20,55,400	69,90,407	14,85,475	-	2,40,31,282	4,10,07,006	17,70,695	4,35,72,750	1,77,00,820
Information Equipments		10%	2,78,108	-	-	-	2,78,108	1,46,01,458	23,87,755	1,62,08,273	82,64,120
Research Equipments		15%	85,80,071	-	-	-	85,80,071	2,44,809	5,067	2,49,756	33,940
Library Equipments		15%	7,02,37,177	-	-	-	7,13,53,000	5,40,05,005	25,52,915	5,69,28	



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**Capital Work in Progress**

SCHEDULE - "B"					Amount (₹)
Particulars	Opening Balance as on 01.04.2021	Addition during the Year	Capitalized during the Year	Expensed Out during the Year	Closing Balance as on 31.03.2022
Material In Transit	-	10,05,360	-	-	10,05,360
Capital Goods in Store	-	63,605	-	-	63,605
Capital Work in Progress	11,81,220	-	-	-	11,81,220
<b>Gross Total</b>	<b>11,81,220</b>	<b>10,68,965</b>	<b>-</b>	<b>-</b>	<b>22,50,185</b>



*Mani*  
 REGISTRAR,  
 Jaypee University of Information Technology  
 Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**Cash and Bank Balance**

**SCHEDULE - "C"**

S.No	Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
I	<b>Cash in Hand</b>	93,956	37,899
II	<b>Balance with Schedule Banks</b>		
	<u>In Current Account :</u>		
	- State Bank of India, Wanknaghat	32,702	1,23,532
	- Punjab National Bank, Shimla	1,12,627	4,07,892
	- Punjab National Bank, Solan (Earst while OBC Bank, Solan)	25,298	35,357
	- Punjab National Bank, Wanknaghat	23,92,926	32,28,978
	- Yes Bank Ltd., Noida	59,783	59,782
	- Cheque / DD in hand	13,825	3,99,037
	<b>Balance with Schedule Banks</b>		
	<u>In Saving Account :</u>		
	- Punjab National Bank, Wanknaghat A/c No. 15239	8,65,139	16,87,538
	- Punjab National Bank, Wanknaghat A/c No. 14461	28,47,359	39,73,626
III	<b>Fixed Deposits with Banks</b>		
	- State Bank of India, Wanknaghat	-	4,25,00,000
	- Punjab National Bank, Shimla	3,72,500	11,75,949
	- Punjab National Bank, Wanknaghat	13,85,00,000	8,10,00,000
	- Interest Accrued but not due	21,46,959	1,14,42,728
IV	<b>Earmarked Deposits with Banks</b>		
	- Canara Bank, Noida (C/A) (Earst while Syndicate Bank, Noida)	83,238	83,828
	- Canara Bank, Noida (FDR) (Earst while Syndicate Bank, Noida)	2,51,61,480	2,22,89,702
	- Interest Accrued on FDR	8,06,529	23,54,976
	<b>TOTAL</b>	<b>17,35,14,321</b>	<b>17,08,00,824</b>

  
 Vice Chancellor

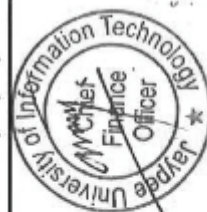
  
 Head Officer

Jaypee University of Information Technology  
 Wanknaghat, Distt. Solan (H.P.)

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**ADVANCES AND RECEIVABLES IN CASH OR IN KIND**

**SCHEDULE - "D"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
<b>Advances To:-</b>		
- Staff	11,112	79,239
- Suppliers/Agencies/Capital Goods/Property	2,33,68,973	2,97,32,899
- Other Educational Trust	6,29,60,035	5,94,41,347
<b>Receivables From:-</b>		
- Students	12,16,187	10,66,450
- Income Tax Department as on 31.03.22	25,01,795	48,57,583
- Assessment Year 2010-11	Rs. 6,61,804	
- Assessment Year 2011-12	Rs. 97,434	
- Assessment Year 2013-14	Rs. 1,09,376	
- Assessment Year 2015-16	Rs. 3,71,907	
- Assessment Year 2021-22	Rs. 6,81,345	
- Assessment Year 2022-23	Rs. 5,79,929	
- Excise & Taxation Department (VAT)	38,17,348	38,17,348
- Income Tax Department Appeal	86,37,753	55,73,000
- Receivable of TCS	3,825	15,390
<b>TOTAL</b>	<b>10,25,17,028</b>	<b>10,45,83,256</b>



REGISTRAR,  
Jaypee University of Information Technology  
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**PREPAID EXPENSES**

**SCHEDULE - "E"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
AMC for Equipments	21,75,554	23,86,928
Insurance	6,77,456	3,70,841
Subscription for Journals & Digital Library	22,07,604	21,54,797
<b>TOTAL PREPAID EXPENSES</b>	<b>50,60,614</b>	<b>49,12,566</b>



*[Signature]*

REGISTRAR,  
Jaypee University of Information Technology  
Waknaghat, Distt. Solan (H.P.)





**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**SECURITY DEPOSITS**

**SCHEDULE - "F"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
For Electricity -HPESBL	22,40,280	22,40,280
For LPG	1,19,800	1,19,800
For Labour Office Solan	12,000	12,000
For Telephones	11,372	11,372
<b>TOTAL SECURITY DEPOSITS</b>	<b>23,83,452</b>	<b>23,83,452</b>



*San*

REGISTRAR,  
Jaypee University of Information Technology  
Waknaghat, Distt. Solan (H.P.)





**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**STOCK-IN-HAND**

**SCHEDULE - "G"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
Annapurna Grocery & Eatables	34,29,682	15,08,080
Housekeeping	51,417	-
Medicines	61,799	78,767
Diesel	13,11,413	11,58,788
General Hardware Items	17,97,358	20,86,739
Electrical Items	20,17,616	31,77,649
Spares for Vehicles	1,63,294	49,595
<b>TOTAL STOCK IN HAND</b>	<b>88,32,579</b>	<b>80,59,618</b>



*Basu*

REGISTRAR,  
Jaypee University of Information Technology  
Waiknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY  
FINANCIAL YEAR 2021-22  
SUNDRY CREDITORS**

**SCHEDULE - "H"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
- For Goods Supplied	74,09,406	22,80,020
- For Services Rendered	1,43,92,094	1,13,33,219
- For Retention	10,23,227	10,52,392
- For Statutory Liabilities	5,41,05,366	5,64,67,476
<b>TOTAL SUNDRY CREDITORS</b>	<b>7,69,30,093</b>	<b>7,11,33,107</b>



*W. Singh*  
REGISTRAR,  
Jaypee University of Information Technology  
Wazirpur, Distt. Solan (H.P.)



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY FINANCIAL YEAR 2021-22 OTHER LIABILITIES			
SCHEDULE - "I"			
Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021	
Uncleared Cheques	9,14,109	17,13,431	
Fee in Advance	10,09,95,525	5,26,52,382	
JYC Students Fund	14,14,070	13,22,295	
Expenses Payable	98,44,522	59,86,897	
T.D.S. Payable	32,49,002	23,46,348	
Salary Payable	1,83,70,306	3,05,56,951	
<b>TOTAL OTHER LIABILITIES</b>	<b>13,47,87,534</b>	<b>9,45,78,304</b>	

*Bani*

REGISTRAR,

Jaypee University of Information Technology  
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**INSTITUTIONAL EXPENSES**

**SCHEDULE - "J"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
Admission Exps. including Advertisement	73,00,431	35,52,715
Audit Fee	3,54,000	3,54,000
Conference & Seminar Expenses	47,018	54,390
Convocation Expenses	33,475	44,048
E-Journals & Periodicals	31,32,962	32,99,278
Electricity Expenses	27,46,327	20,99,909
Honorarium to Faculty & Remuneration of Visiting Faculty	6,74,279	10,39,221
Institute Promotional Expenses	8,19,195	22,97,673
Insurance Expenses	6,04,102	2,86,780
Internet Charges	10,82,950	11,82,113
Interest & Finance Charges	-	1,23,786
Laboratory Expenses	28,01,265	19,04,011
Lease Rent	23,784	10,621
Legal & Professional Charges	8,32,462	4,85,656
Misc. Expenses	2,15,635	1,69,027
Payment to Technical Personnel	38,85,993	38,79,733
Placement Expenses	66,497	4,598
Postage & Telegram	86,949	63,845
Prior Period Exps.	73,414	31,003
Printing & Stationery	9,32,237	7,56,055
Recruitment Expenses	1,93,318	2,78,261



REGISTRAR,  
Jaypee University of Information Technology  
Wazirpur, Distt. Solan (H.P.)





**SCHEDULE - "J" (Continued)**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
Scholarship to Students	31,39,332	63,04,440
Security Expenses	53,41,272	39,00,325
Staff Welfare	18,92,135	14,36,919
Telephone Expenses	6,43,633	6,39,997
Travelling & Conveyance	6,04,946	3,15,813
Water Expenses	13,39,147	11,13,268
<b>Repair &amp; Maintenance</b>		
- Civil Maintenance	31,62,834	40,64,606
- Equipment & Machinery	53,91,575	23,74,526
- Furniture & Fixture	4,32,356	6,19,610
- Horticulture Exps.	26,97,213	23,97,982
- Institute House Keeping	35,13,706	23,94,156
- Others	9,34,168	10,02,878
- Vehicles	25,40,637	19,51,201
- Water Supply Scheme	2,95,795	7,04,147
<b>TOTAL INSTITUTIONAL EXPENSES</b>	<b>5,78,35,042</b>	<b>5,11,36,591</b>



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**SALARY & ALLOWANCES**

**SCHEDULE - "K"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
<b>Teaching Staff :</b>		
Salary	10,37,59,638	9,55,18,101
Conveyance Allowance	69,45,266	64,54,859
H.R.A.	58,18,761	57,27,558
Medical Reimbursement	41,66,403	38,26,509
Leave Travel Assistance	37,62,568	13,064
Contribution to Provident Fund	1,25,86,259	1,13,75,203
Provision for Gratuity	15,41,113	41,32,299
Other Allowances	3,55,12,856	2,09,36,619
<b>Sub - Total</b>	<b>17,40,92,864</b>	<b>14,79,84,212</b>
<b>Non-Teaching Staff :</b>		
Salary	3,85,08,089	3,62,93,856
Conveyance Allowance	19,36,890	19,16,894
H.R.A.	30,43,937	28,07,648
Medical Reimbursement	13,48,542	12,85,006
Leave Travel Assistance	13,92,656	-
Contribution to Provident Fund	43,97,049	38,11,851
Provision for Gratuity	6,29,469	16,54,789
Other Allowances	72,53,303	56,22,806
<b>Sub - Total</b>	<b>5,85,09,935</b>	<b>5,33,92,850</b>
<b>TOTAL SALARY &amp; ALLOWANCES</b>	<b>23,26,02,799</b>	<b>20,13,77,062</b>



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**STUDENTS HOSTEL EXPENSES**

**SCHEDULE - "L"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
Grocery & Eatables Consumed	1,56,01,332	44,48,853
Security Expenses	1,24,67,967	91,00,768
Electricity Charges	98,96,465	76,95,167
Water Charges	46,18,839	32,88,855
Housekeeping Expenses	1,10,35,485	69,85,803
Dispensary Expenses	45,93,944	67,59,272
Students Welfare Expenses	8,35,908	6,54,461
Messing Staff Expenses	89,52,585	49,89,303
Salary Annapurna & Technical Staff	90,67,316	88,94,372
Repair & Maintenance	75,53,352	62,16,000
Laundry Expenses	10,22,912	1,32,011
<b>TOTAL STUDENTS HOSTEL EXPENSES</b>	<b>8,56,46,105</b>	<b>5,91,64,865</b>



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**COLLECTIONS FROM STUDENTS**

**SCHEDULE - "M"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
<b>Fee From Students:</b>		
Tuition Fee	29,23,17,605	26,89,59,590
Hostel Fee	3,57,94,279	2,70,13,211
<b>Sub Total :</b>	<b>32,81,11,884</b>	<b>29,59,72,801</b>
<b>Other Collection:-</b>		
Sundry Charges	3,86,961	2,26,332
Admission Form Charges	36,05,650	19,87,215
Tuck Shop Charges	7,18,731	22,005
Mess Charges	45,09,852	22,95,584
<b>Sub Total :</b>	<b>92,21,194</b>	<b>45,31,136</b>
<b>TOTAL COLLECTIONS FROM STUDENTS</b>	<b>33,73,33,078</b>	<b>30,05,03,937</b>



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**INTEREST RECEIVED ON FDRs**

**SCHEDULE - "N"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
Punjab National Bank - Shimla	11,795	68,903
Punjab National Bank - Wagnaghat	41,77,767	58,51,251
State Bank of India - Wagnaghat	61,378	11,42,830
Canara Bank -UBSK (earstwhile Syndicate Bank , Noida)	14,70,368	15,89,226
<b>TOTAL INTEREST RECEIVED</b>	<b>57,21,308</b>	<b>86,52,210</b>



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
**FINANCIAL YEAR 2021-22**  
**OTHER INCOME**

**SCHEDULE - "O"**

Particulars	Amount (₹) 31.03.2022	Amount (₹) 31.03.2021
Other Miscellaneous Income	5,34,842	2,84,347
Notice Pay Recovery	13,59,308	8,81,250
Overhead Charges for Research Projects/Consultancy	38,700	7,94,646
Sundry Balance Written Off	35,213	7,737
<b>TOTAL OTHER INCOME</b>	<b>19,68,063</b>	<b>19,67,980</b>



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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY  
WAKNAGHAT, SOLAN, HIMACHAL PRADESH

FINANCIAL YEAR 2021-22

**SCHEDULE – “P” : SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS FORMING PART OF ACCOUNTS.**

**I. BACK GROUND**

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, HAVING HEAD QUARTER AT WAKNAGHAT, HIMACHAL PRADESH IS A BODY CORPORATE BY THE NAME AFORE SAID, ESTABLISHED AND INCORPORATED UNDER SECTION 3 OF JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY ACT NO. 14 OF 2002 (AS ASSENTED TO BY THE GOVERNOR ON 22<sup>ND</sup> MAY, 2002) AND NOTIFIED U/SEC 10(23C) AND 80G OF THE INCOME TAX ACT, 1961. THE UNIVERSITY CONTINUE TO RUN ON “NOT FOR PROFIT” BASIS TO OFFER TECHNICAL EDUCATION OF THE HIGH STANDARDS BY TEACHING, RESEARCH, TRAINING AND EXTENSION ACTIVITIES. THE UNIVERSITY HAS ESTABLISHED THE “UNNAT BHARAT SHODH KOSH” FOR CARRYING OUT THE RESEARCH ACTIVITIES INVOLVING STUDENTS, FACULTY MEMBERS AS WELL AS INDUSTRY.

**II. SIGNIFICANT ACCOUNTING POLICIES**

**A) GENERAL**

THE ACCOUNTS HAVE BEEN PREPARED UNDER MERCANTILE SYSTEM OF ACCOUNTING AS PER HISTORICAL CONVENTION TO MEET WITH THE REQUIREMENTS OF CLAUSE 20 (1) AND (2) OF ACT NO.14 OF 2002 OF JUIT ACT AND THE REQUIREMENTS OF THE INCOME TAX ACT 1961 AND RECOGNIZED ACCOUNTING POLICIES AND PRACTICES INCLUDING ACCOUNTING STANDARDS ISSUED BY THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA TO THE



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Waknaghat, Distt. Solan (H.P.)



EXTENT APPLICABLE, EXCEPT OTHERWISE STATED, ACCOUNTING POLICIES NOT SPECIFICALLY REFERRED TO OTHERWISE BE CONSISTENT AND IN CONSONANCE WITH GENERALLY ACCEPTED ACCOUNTING POLICIES.

**B) USE OF ESTIMATES:**

THE PRESENTATION OF FINANCIAL STATEMENTS IN CONFORMITY WITH THE GENERALLY ACCEPTED ACCOUNTING PRINCIPLES REQUIRES ESTIMATES AND ASSUMPTIONS TO BE MADE THAT AFFECT THE REPORTED AMOUNT OF ASSETS AND LIABILITIES ON THE DATE OF THE FINANCIAL STATEMENTS AND THE REPORTED AMOUNT OF REVENUES AND EXPENSES DURING THE REPORTING PERIOD. DIFFERENCE BETWEEN ACTUAL RESULT AND ESTIMATES ARE RECOGNIZED IN THE PERIOD IN WHICH THE RESULTS ARE KNOWN/ MATERIALIZED.

**C) FIXED ASSETS**

FIXED ASSETS ARE STATED AT COST OF ACQUISITION INCLUSIVE OF FREIGHT AND OTHER INCIDENTAL EXPENSES.

**D) DEPRECIATION**

DEPRECIATION ON FIXED ASSETS HAS BEEN PROVIDED ON WRITTEN DOWN VALUE AS PER THE CLASSIFICATION AND ON THE BASIS OF PROVISIONS OF INCOME TAX ACT, 1961.

**E) INVENTORY:** INVENTORY OF CONSUMABLES LIKE GROCERY & Eatables, STATIONARY, MEDICINES, LABORATORY CONSUMABLES, STORES & SPARE ARE VALUED AT COST OR NET REALIZABLE VALUE WHICHEVER IS LESS. INVENTORY OF DIESEL IS VALUED AT YEARLY WEIGHTED AVERAGE BASIS.

**F) CLAIMS**

CLAIMS LIKE INTEREST ON INCOME TAX-REFUND, INSURANCE CLAIMS ETC. ARE ACCOUNTED FOR ON RECEIPT BASIS.



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G) REVENUE: TUITION AND HOSTEL COLLECTED FROM STUDENTS FOR A SEMESTER HAS BEEN PRORATED OVER THE PERIOD OF SEMESTER. OTHER CHARGES RECOVERED FROM STUDENTS HAVE BEEN RECOGNIZED IN THE YEAR OF RECEIPT.

BORROWING COST: BORROWING COST INCURRED DURING CONSTRUCTION PERIOD IS DIRECTLY CHARGED TO PROFIT & LOSS A/C.

#### H) EMPLOYEE BENEFITS

- SHORT TERM EMPLOYEE BENEFITS ARE RECOGNIZED AS AN EXPENSE AT THE UNDISCOUNTED AMOUNT IN INCOME & EXPENDITURE ACCOUNT OF THE YEAR IN WHICH THE RELATED SERVICE IS RENDERED.
- POST EMPLOYMENT AND OTHER LONG TERM EMPLOYEE BENEFITS ARE RECOGNIZED AS AN EXPENSE IN THE INCOME & EXPENDITURE ACCOUNT FOR THE YEAR IN WHICH THE EMPLOYEE HAS RENDERED SERVICES. THE EXPENSE IS RECOGNIZED AT THE PRESENT VALUE OF THE AMOUNT PAYABLE DETERMINED USING ACTUARIAL VALUATION TECHNIQUES. ACTUARIAL GAINS AND LOSSES IN RESPECT OF POST EMPLOYMENT AND OTHER LONG TERM BENEFITS ARE CHARGED TO INCOME AND EXPENDITURE ACCOUNT.

#### I) FOREIGN CURRENCY TRANSACTIONS:

TRANSACTIONS IN FOREIGN CURRENCY LIKE FEES RECEIVED IN FOREIGN CURRENCY ARE RECORDED AT THE EXCHANGE RATE PREVAILING ON THE DATE OF TRANSACTION. AMOUNT PAYABLE AND RECEIVABLE IN FOREIGN CURRENCY AS AT THE BALANCE SHEET DATE ARE REINSTATED AT THE APPLICABLE EXCHANGE RATES PREVAILING ON THAT DATE. ALL EXCHANGE DIFFERENCES ARE CHARGED TO INCOME & EXPENDITURE ACCOUNT IF RELATE TO REVENUE TRANSACTIONS AND ADJUSTED TO THE COST OF CAPITAL ASSETS IF RELATE TO CAPITAL TRANSACTIONS.



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### III. NOTES ON ACCOUNTS

#### 1. CONTINGENT LIABILITIES:

A) DISPUTED VAT LIABILITY UNDER APPEAL Rs. 38,17,348/- (PREVIOUS YEAR: Rs. 38,17,348/-)

B) DISPUTED INCOME TAX LIABILITY UNDER APPEAL Rs. 3,46,77,021/- (PREVIOUS YEAR: 1,02,02,851/-)

\* AMOUNT PAID Rs. 86,37,753 (PREVIOUS YEAR Rs. 55,73,000/-) SHOWN IN SCHEDULE-D

#### 2. BALANCES IN PARTIES' ACCOUNTS ARE SUBJECT TO CONFIRMATION FROM THEM.

3. FUNDS RECEIVED FROM VARIOUS GOVERNMENT AUTHORITIES/RESEARCH FUNDING AGENCIES FOR UTILIZATION IN VARIOUS PROJECTS AS DIRECTED BY THAT AUTHORITIES/AGENCIES ON THEIR BEHALF HAS BEEN SHOWN UNDER "RESEARCH PROJECT FUND". DETAILS OF UTILIZATION OF RESEARCH PROJECT FUND DURING THE YEAR IS AS FOLLOWS:-

PARTICULARS	OPENING BALANCE AS ON 01.04.2021 (Rs)	RECEIVED DURING THE YEAR* (Rs)	REFUND DURING THE YEAR (Rs)	UTILIZATION DURING THE YEAR			CLOSING BALANCE AS ON 31.03.2022 (Rs)
				REVENUE EXPENDITURE (Rs)	CAPITAL EXPENDITURE (Rs)	TOTAL (Rs)	
DST/DBT/ HIMCOST- PROJECTS	53,82,470	9,91,856	2,09,574	22,11,321	-	22,11,321	39,53,431
OTHER PROJECTS	30,81,935	1,02,632	-	3,44,654	-	3,44,654	28,39,913
TOTAL	84,64,405	10,94,488	2,09,574	25,55,975	-	25,55,975	67,93,344



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4. PREVIOUS YEAR FIGURES HAVE BEEN REGROUPED/ REARRANGED OR RECLASSIFIED WHEREVER FOUND NECESSARY TO CONFIRM WITH CURRENT YEAR'S CLASSIFICATION.
5. FIGURES HAVE BEEN ROUNDED UP TO NEAREST RUPEES.

FOR DASS GUPTA & ASSOCIATES  
CHARTERED ACCOUNTANTS  
REGISTRATION NO: 006732



(ASHOK KUMAR JAIN)  
PARTNER  
MEMBERSHIP NO: 090563



(RAJENDRA KUMAR SHARMA)  
VICE CHANCELLOR

PLACE: NEW DELHI  
DATE: 14.09.2022

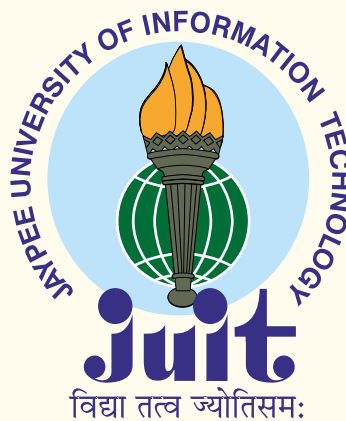
FOR JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY



(HEMANT VYAS)  
CHIEF FINANCE OFFICER

*[Signature]*

MAJ GEN RAKESH BASSI SM (RETD.)  
REGISTRAR,  
Jaypee University of Information Technology  
Waknaghat, Distt. Solan (H.P.)



## **JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**

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