

**ADMISSION BROCHURE 2024**





**Jaiprakash Gaur**

Founder Chancellor of JIIT and  
Founder Chairman, Jaypee Group

## “ Founder Chairman’s Message

Long before OUR first dam and years before OUR first cement plant, we built a free school and hospital. Today they tell US, what we did, is called Corporate Social Responsibility; CSR Spirit of Jaypee GROUP

The Jaypee Group has always been proud to participate in nation building right from its inception. We feel doubly responsible to make this Group to become a benchmark of contribution to the up-liftment of society. CSR has become an integral part of everything that we do and same is instilled in our vision, strategies and management goals.

JAIPRAKASH SEWA SANSTHAN (JSS), a not-for-profit trust, was established in 1993 to bring many not-for-profit activities of the Group under one common umbrella, in order to give them a unified focus and direction. The Sansthan today spearheads one of the largest altruistic CSR programmes run by any single - entity corporate anywhere in the country.

Firmly believing in the famous saying of Nelson Mandela “Education is the most powerful weapon which can be used to change the world”, we at Jaypee fully subscribe to the view that Education is the cornerstone to economic development and that the strength of Indian masses can be channelized by education alone. The real future of India lies in its thousands of faceless little towns and villages, where millions of boys and girls lie awake at night, dreaming of what could be. And we also believe that the key to unlock those dreams and help them soar is good education. Therefore, the Jaypee Group, through its trust, has opened large number of schools, polytechnic colleges and institutes of higher learning, teaching over 30,000 students under its wings. These institutions of learning host the best of faculty and educational infrastructure towards creation, generation, dissemination and application of knowledge through an innovative teaching - learning process to mould the leaders of tomorrow.

All the institutions of higher learning aim at building character sharpen intellect and enable free thinking amongst the students and provide them opportunity to become innovative and enterprising professionals, fully capable of meeting the challenges of modern India.

# Leadership



## Shri Manoj Gaur

*Chancellor – Jaypee Institute of Information Technology, Noida and Jaypee University, Anoopshahr*

*Pro-Chancellor – Jaypee University of Information Technology, Waknaghat, H.P*  
*Executive Chairman of the Jaypee Group.*

An engineer by qualification, Shri Gaur is widely respected as a visionary industry captain, who has successfully mapped

and executed the massive expansion of the Jaypee Group and converted it into a conglomerate of diverse industrial businesses.



## Prof. (Dr.) S.C. Saxena

*Pro-Chancellor – Jaypee Institute of Information Technology, Noida And Jaypee University, Anoopshahr*

Prof. Saxena has an outstanding academic record. Former Director, IIT Roorkee, Mentor Director, IIT Mandi, Director, TIET Patiala, Director, TCIRD Patiala, amongst host of other important assignments

like Chairman, NRC, AICTE New Delhi, and Independent Director (two terms) of

THDCIL, a Gol and UP Govt Navaratna Public Sector company. He is Life Fellow of the Institution of Engineers (India) and Life Fellow of the IETE.



## Prof. (Dr.) Bodh Raj Mehta

*Vice Chancellor – JIIT and Director (Research, Innovation and Development), Jaypee University System.*

Prof Mehta has worked as Dean (R & D) and Schlumberger Chair Professor, Department of Physics at IIT Delhi. He has been Technical Advisor of 2 start ups.

He has supervised 40 PhD scholars, published 250 journal papers, completed 55 research and industry projects and has been Technical Advisor of 2 successful start ups. He has received life-time achievement award 2021 from IIT Delhi.



## Prof. (Dr.) Rajendra Kumar Sharma

*Vice-Chancellor – Jaypee University of Information Technology, Waknaghat, H.P*

Prof. Sharma, an alumni of IIT-Roorkee, a reputed academician and good researcher. Former Dean of Faculty Affairs and Dean of Academic Affairs, Thapar Institute of Engineering and Technology, Patiala, Punjab.



## Prof. (Dr.) D. K. Rai

*Vice-Chancellor – Jaypee University of Engineering & Technology, Guna, M.P*

Prof. Rai, an alumnus of BHU Varanasi, is a Professor of Physics and Materials Science and Engineering. He has been Head of Department, Dean (A&R) and Director at JIIT Noida and also worked as officiating Vice-Chancellor at Jaypee University Anoopshahr.



## Prof. Dr. Sanjay Goel

*Vice Chancellor – Jaypee University, Anoopshahr, Bulandshahr, U.P*

Prof. Goel, an alumni of BITS Pilani has encompassed different roles at various institutions including NSUT, IGNC, JIIT, JKLU and Galgotias University. His Leadership position includes Project Manager & Director, HOD(CSE&IT), Director(IET), Dean(Academics) and Dean(School of CSE).

## Council of Wise

The Chancellor of Jaypee Institute of Information Technology, Noida and Executive Chairman of Jaypee Group has constituted an Advisory Council of eminent and distinguished academicians to guide and take Jaypee Education System to next stage of excellence in its operation, in this defining era. The composition of the Council of Wise (COW) is as follows :



Sh. Manoj Gaur, Hon. Chancellor, Jaypee Institute of Information Technology, Noida, Jaypee University, Anoopshahr, Pro-Chancellor, Jaypee University of Information Technology, Waknaghat, H.P and Executive Chairman, Jaypee Group



Prof. Ashok Misra, Former Director, IIT Bombay, Former Chairman, BOG, IIT Roorkee and Former Chairman, Indian Intellectual Ventures



Dr. Satish Kumar, Former Director, NIT Kurukshetra, Former Director General, DRDO, Govt. of India



Prof. K.P. Singh, Former Director, IT-BHU (now IIT), Vice-Chancellor, VBS Purvanchal University



Prof. K. Sudha Rao, Former Vice-Chancellor, Karnataka State Open University, National Fellow-Indian Council of Social Science Research



Prof. S.C. Saxena, Pro-Chancellor, JIIT, Noida, Former Director, IIT Roorkee

## The Council of wise has the following mandate :

“To guide and monitor the academic and research progress of Jaypee Institute of Information Technology (JIIT), Noida and other Jaypee Universities and to advise/ guide them on existing and new initiatives in the areas of teaching, learning, training, research, IPR, Sponsored Research Projects, upgradation of skills, association with other leading institutions in India and abroad and any other related matters and enable them to make a distinct place of themselves in the galaxy of higher technical education of India/abroad.”



# Jaypee Institute of Information Technology (JIIT), Noida, U.P

(Approved by UGC as Deemed-to-be-University under section 3 of UGC Act 1956)



## Professor Vikas Saxena

*Director – Jaypee Institute of Information Technology ,  
Head, Dept. of CSE & IT*

Professor Vikas Saxena has a teaching and research experience of 20 years. He has more than 80 publications in refereed journals and conferences. He has served as reviewer of several world class journals & conferences. He is serving as a key organizer of a premier computing conference IC3.



## Professor Pammi Gauba

*Head, Dept. of Biotechnology, Dean (A&R)-I Dean (International Affairs & Sponsored Projects)*

Professor Pammi Gauba, has experience of 30 years in teaching and research in India and abroad. Her current research focuses on bioremediation. She is an active researcher with number of publications in journals of international repute and has received extramural funding worth INR 2.5 Crores from various government agencies like MoEF, DST, ICMR, Ministry of Ayush.



## Prof. Shweta Srivastava

*Head, Dept of Electronics and Communication Engineering and Dean (A&R)-II*

Professor Shweta Srivastava has a teaching and research experience of 25 years. She is an active researcher in the field of Antennas and SIWs. She has around 100 International and National journal publications in reputed journals. She received SERC fast track project for young Scientist by DST. She has been awarded “Smt. Ranjana Pal Memorial Award 2016” by IETE.



## About JIIT

AICTE approved, NAAC accredited and NIRF ranked, Jaypee Institute of Information Technology (JIIT), Noida, setup in 2001, was conferred the status of a Deemed to be University in 2004, and since then, has evolved into a centre of excellence in the field of Computer Science & Engineering, Information Technology, Electronics and Communication Engineering, Biotechnology, Management and related emerging areas of education, training and research. Replete with a challenging and intellectually stimulating academic environment, JIIT has a vision of producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

JIIT attracts the brightest and the best students regardless of their Social, Educational, Regional or Ethnic background. Students imbibe top rated education and enjoy a campus culture of unparalleled depth and diversity. JIIT ensures that students with the potential flourish and develop into top professionals and contribute in development of the nation.

At JIIT, special emphasis is being placed on developing a student on a solid foundation of knowledge, confidence building, pursuit of excellence, improving self-discipline and enhancement of creativity through motivation and drive into an engineer, well trained for the rigors of professional and social life.

JIIT encourages all students to make the life outside the classroom vibrant and enjoyable by engaging themselves in multiple extracurricular areas, no matter how talented or experienced they are in any of those areas. This is enhanced by best of facilities provided to make life outside the classroom into an exciting and memorable experience.

JIIT is a fully air-conditioned campus. Has an unparalleled state-of-the-art, high- tech and environmentally conditioned infrastructure with a built up area of over 1,41,610 sq.m with Residential Campus, Academic Block comprising Lecture Theaters, Smart Classrooms, Labs, Learning Resource Centres with rich resources of printed books, e-books and e-journals, Faculty Residences, Student Hostels, Annapurna, Auditorium (2,500 capacity), advanced Audio Visual facility and high capacity internet connectivity.

## Programs of Study

### Diploma (3 Years)

- ◆ Computer Science & Information Technology (CS&IT)
- ◆ Electronics Engineering (Microelectronics)
- ◆ Food Technology

### Undergraduate (4 Years)

#### B.Tech.

- ◆ Biotechnology (BT)
- ◆ Computer Science and Engineering (CSE)
- ◆ Electronics and Communication Engineering (ECE)
- ◆ Electronics and Computer Engineering (ECM)
- ◆ Information Technology (IT)
- ◆ EE(VLSI Design and Technology) (EE-VLSI)
- ◆ EC (Advanced Communication Technology) (EC-ACT)
- ◆ Mathematics and Computing (M&C)

### Undergraduate (3/4 Years)

- ◆ BBA at Jaypee Business School
- ◆ B Sc (Computer Science)
- ◆ B C A

### Integrated M.Tech. (5 Years)

- ◆ Biotechnology (BT)
- ◆ Computer Science and Engineering (CSE)
- ◆ Electronics and Communication Engineering (ECE)

### Post Graduate (2 Years)

#### M.Tech.

- ◆ Biotechnology (BT)
- ◆ Computer Science & Engineering (CSE)
- ◆ VLSI Design

#### M.Sc

- ◆ Physics ◆ Mathematics ◆ Microbiology
- ◆ Environmental Biotechnology ◆ Economics

### MCA

### MBA (2 Years) at Jaypee Business School

The two year full time program at JBS covers various areas of business such as accounting, applied statistics, business communication, IT applications, business ethics, business law, finance, economics, human resource management, marketing, business analytics, supply chain and operations in a manner most relevant for contemporary business practices and strategy.

#### MBA with specialization in

- ◆ Human Resource ◆ Finance ◆ Marketing
- ◆ Operations ◆ Information Technology ◆ Business Analytics ◆ Hospital & Healthcare Management
- ◆ Education Management.

### Ph.D

- ◆ Biotechnology
- ◆ Computer Science & Engineering
- ◆ Electronics & Communication Engineering
- ◆ Humanities & Social Sciences
- ◆ Management
- ◆ Mathematics
- ◆ Physics and Materials Science & Engineering
- ◆ Computer Applications



## Minor Degree/Degree with Honours/ Specialization

University offers minor / honours / specialization in Artificial Intelligence & Machine Learning, Data Science / Data Analytics, VLSI, 5G and Advanced Tech, Quantum Computing & Quantum Communication and Universal Human Values to all B.Tech students. For this students need to take 18 credits (in addition to 160 credits for B.Tech degree). Those students who opt for additional 18 credits in same discipline, the B.Tech Degree will be awarded B.Tech (Honours) with specialization in Specialization Field. Students taking Additional 18 credits in discipline other than B.Tech discipline will get minor degree.

## Proficiency Certificate

A B.Tech student will get a Proficiency Certificate in sub-area of the major degree. To be eligible for award of Certificate the student must pass with minimum of 50% or more of B.Tech elective subjects taken from the chosen stream. The conditions for awarding Certificate are; securing a minimum CGPA of 4.5 and earning the required credit specified for the program of a particular batch as specified. The details are available on website of University.

## Ramanujan Universe

In the current era of Digital World of artificial intelligence and machine learning, it is essential that students in technical education and researchers have access to high performance computing facility and even Government of India is taking several initiatives in this direction. On the occasion of National Mathematics Day which is celebrated on the birth anniversary of one of the greatest Mathematicians S. Ramanujan, a High Performance Supercomputing Center (HPC) called "Ramanujan Universe" was inaugurated at the Jaypee Institute of Information Technology (a part of Jaypee Universities), Noida at its Sector-128, Noida Campus. The newly developed HPC facility has 8, A100 GPU cards accelerated node, 6 compute nodes, 384 Cores, more than 3500GB RAM & 100GB infiniband connectivity with performance of the scale of Petaflops. In the Era of Artificial Intelligence & Machine learning, this facility will play a crucial role in advancing scientific research culture, technological

innovation, and solving complex real-world problems in the areas of medical science, artificial intelligence, robotics, and many more by harnessing the power of high-speed computation and data processing as It is capable to process very large amount of data at incredibly high speeds. Students of all Jaypee Universities & other Educational Units of Jaypee Education System are provided the access of Ramanujan Universe.



## Directorate of Research, Innovation and Development

With the declaration of 2021-2030 as the INNOVATION DECADE in Jaypee Education System, an independent vertical of Directorate of Research, Innovation and Development (DRID) has been established for enhancing culture of innovation and collaboration in 4 Jaypee Universities. DRID is working towards engaging student and faculty in innovation and incubation activities by providing seed funds for Idea and Innovation projects, student Pre-startups, student and faculty driven start-ups and establishing Inter Jaypee University Centre of Excellence in key R & D areas. Faculty members from different JU are collaborating and carrying out joint research in CoE's in Artificial Intelligence for Education: Environment and Sustainability; UAV and Electronic border Security and Intelligent Evaluation and Rehabilitation of Structures. DRID has undertaken two new initiatives by setting up RIDE innovation Hub and Digital Learning Centre at IIIT in strong partnership with other JU's.

### RIDE innovation Hub

RIDE (Research, Innovation, Development and Entrepreneurship) Innovation Hub has been set up at IIIT to provide a platform to students and faculty of IIIT and other Jaypee

Universities to carry out incubation activities. As a registered legal entity with well-defined incubation goals, it has 15000 sq. ft space with facilities for start-up cubicles, collaboration Space, Innovation Laboratories and other facilities for start-up, pre-start up and innovation projects. RIDE is equipped to provide legal, business and technical mentorship to incubates to assist them achieve the technical and business goals.

### Digital Learning Centre

Digital Learning Centre(DLC) is a major initiative of DRID and it has facilities of state-of-the-art class room studio, discussion studio and virtual chroma studio along with animation and editing facilities. The central objective of DLC is to prepare rich digital content in science, engineering and management disciplines for blended and on-line education and establish a digital network connecting all the four JU campuses for enhancing the student-teacher interaction and impacting a larger number of students. It will be powered by Advanced Digital Technologies and Artificial Intelligence for providing a unique learner centric experiences to students and trainees.

RIDE Innovation Hub, DLC, RU located at IIIT Noida are available to all students / Faculty / Research Scholars of IIIT-Noida, JUIT-Waknaghat, JUIT-Guna and JUA-Aannopshahr.





## International Students Cell at JIIT

This cell has been established to promote following activities between Jaypee Universities and Universities/Organizations abroad:

- Admission of foreign students in Jaypee Universities
- Establish collaboration with foreign universities for Joint Research, Development and Innovation activities.
- Jointly organize International Conferences/Seminars/Workshops/Symposium/Webinars etc.
- Students/Faculty exchange programs
- Internship of Jaypee students in foreign Universities and foreign students in Jaypee Universities.
- International Students Cell will facilitate admissions, academic issues, boarding and lodging matters, visa matters etc. of foreign students.

### International students may contact:

**Prof. Pammi Gauba**, Dean, International Affairs **E-mail:** pammi.gauba@jiit.ac.in  
**Mobile:** +919810389717 **Prof. Reema Gabrani**, Professor, Deptt. of Biotechnology  
**E-mail:** reema.gabrani@jiit.ac.in **Mobile:** +919717152115 **Website :** www.jiit.ac.in,  
**E-mail:** registrar@jiit.ac.in



## Significant Achievements/Highlights -JIIT

- ♦ NIRF (MHRD) All India Rankings : JIIT has consistently achieved rank in top 150 institutions in engineering category since 2016.
- ♦ Accredited by NAAC with 'A' grade in 2023.
- ♦ AICTE approved Institution since 2018
- ♦ Highly experienced faculty members. Majority from IIT's and other Institutions/Universities of repute.
- ♦ MoUs with Foreign Universities for student/ faculty exchange and collaborative research.
- ♦ 18318 alumni including 324 Doctoral, 13905 B.Tech, 1622 M.Tech (including Dual/ Integrated Degree) , 1761 MBAs, 91 M.Sc.s and 164 BBAs.
- ♦ Organized 49 International Conferences, over 380 invited talks and 150 workshops and seminars with 7,300 delegates from India and abroad during last 9 years. Organized more than 110 Webinars during last 3 year.
- ♦ Contributed 5,846 Research Papers in International and National Journals/Conference, 50 Books and 415 Book Chapters, 52 Case studies.
- ♦ 62 Research Projects worth Rs. 1.41 Cr completed and 34 Research Projects worth Rs. 8.0 Cr currently running. Projects sanctioned from Government Agencies like DRDO, DST, AICTE, DBT, AYUSH etc.
- ♦ Option of VIII Semester Studies at University of Florida at Gainesville for selected UG students.
- ♦ Credited with 61 Patents filed, 584 patents published, 3 patent granted and 1 technology transfer.
- ♦ 107 Classrooms, 117 Laboratories, 2 Auditoriums, Administrative Offices, Outdoor and Indoor sports facilities, Dispensary, 3 Swimming pools, 11 hostels accommodating 1,560 boys and 624 girls in double occupancy, Vice-Chancellor, Director, Faculty and Staff residences.
- ♦ 342 faculty members, 82% with Ph.D and 100% with PG Degrees.
- ♦ About 50 National and International awards for research, received by faculty and students of Institute.
- ♦ 324 Ph.D produced since 2008-09.
- ♦ 2023 pass-out B.Tech, M.Tech & Dual Degree students are placed in 166 companies with 140% offers and 98% absolute placements. MBA students are placed in 76 companies with 100% offers and 85% absolute offers.
- ♦ JIIT was one of the 100 institutions across India and only private Institution in Uttar Pradesh and NCR region to be awarded the 5G Use Case Lab by the Department of Telecommunications, Government of India and the lab was one of the 4 labs

- inaugurated by Hon. Prime Minister during India Mobile Congress on 27/10/2023.
- ◆ Secretary DST, Prof. Abhay Karandikar inaugurated the 9th edition of International Conference on Signal Processing and Communication at IIIT and gave his Keynote talk on 21/12/23
  - ◆ The highest salary package offered for the 2023 batch is INR 82.89 Lakhs to a student by Atlassian. Companies like Microsoft, Amazon, Adobe, Google, Morgan Stanley, Deloitte, Nestle, SAP Labs, Intuit, ZS Associates, Pure Storage, etc visited the campus. The average salary package is INR 11.13 Lakhs and median salary package INR 8.15 Lakhs
  - ◆ Secretary DBT, Prof. Rajesh S Gokhale, inaugurated the 7th International Conference on Advances in Biotechnology and Biosciences and gave the keynote talk on 31/01/24 at IIIT campus.
  - ◆ Member Secretary, AICTE Prof. Rajive Kumar inaugurated the Ramanujam Universe, a high performance computing facility for all students and faculty of Jaypee Education System on 22/12/24.
  - ◆ Option for credits completion through MOOC courses available from NPTEL and SWAYAM, MOE,GOI.
  - ◆ Student documents deposited in NAD DIGI-LOCKER
  - ◆ Participation in Swachh Bharat Abhiyan of MOE, GOI.
  - ◆ Has Institution Innovation Council (IIC) to promote Innovation and Entrepreneurship among students and linked to MOE's Innovation Cell, GOI.
  - ◆ Participates in Study in India Program of MOE, GOI for admission of foreign students, which is available to NIRF ranked Institutions.
  - ◆ Has National Service Scheme (NSS) of GOI for students.
  - ◆ Participates in Atal Ranking of Institutions on Innovation Achievements (ARIIA), an initiative by MOE's Innovation Cell, GOI.
  - ◆ Chairman AICTE, Prof. T. G. Sitharam inaugurated a workshop on 5G and VLSI Education at IIIT along with the launch of two new B.Tech programs on VLSI and Advanced Communication Technology



# Jaypee University of Information Technology (JUIT), Wagnaghat, H.P

(Approved by UGC under Section 2(f) of UGC Act 1956)



## Professor Ashok Kumar Gupta

*Dean (Academics & Research). He has been listed amongst the top 2% scientist in Stanford list of prominent scientists – Jaypee University of Information Technology*

Prof. Ashok Kumar Gupta obtained his BE (Hons) and ME both from the University of Roorkee (now IIT Roorkee) and Ph.D. from IIT Delhi. Thereafter, he joined NIT Hamirpur where he served for 23 years.

Thereafter, Prof. Gupta joined JUIT, Solan and served as Prof. and Head of Department of Civil Engineering before moving to current designation Dean (Academics & Research).

## About JUIT

It is fully Wi-Fi campus supplemented with fiber-optic network connecting its labs, classrooms, library, and hostels. The computing infrastructure consists of state-of-the-art multi-processor servers accessed by an array of multimedia desktops.

Twice NAAC accredited, Biotechnology course NBA accredited, NIRF ranked, Jaypee University of Information Technology, Wagnaghat, H.P, was setup in 2002, and conferred the status of State Private University of H.P. Spread over 25 acres of lush green picturesque slopes of Wagnaghat, in District Solan of Himachal Pradesh, it covers a total built-up area of over 73,864.81 m<sup>2</sup>. and has modern hostels for both boys and girls, faculty residences, students mess, auditorium, sports facilities, laundry, dispensary and other associated services.

At present, around 80% students (boys and girls) along with 61% faculty members reside in campus. Internet connectivity is available to all faculty & students.

The University encourages students to make life outside the classroom vibrant and enjoyable by engaging in multifarious extracurricular activities. For this a very active Jaypee Youth Club with various other Clubs exists. This is enhanced by best of facilities and equipment.

All the lecture theatres/classrooms have multimedia projection systems for facilitating computer-based and web-based learning. The University has 60 well equipped labs in various disciplines. There is a language lab to assist students to enhance their communication skills. The JUIT has recently equipped its classrooms with Digital Infrastructure and has procured Google G-Suite for online teaching. Faculty members make use of the LMS Moodle for interacting with students.



# Programs of Study

## Undergraduate (4 Years)

### B.Tech.

- ◆ Bioinformatics (BI)
- ◆ Biotechnology (BT)
- ◆ Civil Engineering (CE)
- ◆ Civil Engineering with Computer Application (CEC)
- ◆ Computer Science and Engineering (CSE)
- ◆ Computer Science and Engineering with specialisation in AI-ML/AI-DS/Cyber Security/UI-UX Design/ Business System/Full Stack Software Development
- ◆ Electronics & Communication Engineering (ECE)
- ◆ Electronics and Computer Science (ECS)
- ◆ Electronics Engineering (VLSI Design & Technology) (EEV)
- ◆ Information Technology (IT)

### B.Sc & BBA Programs

- ◆ BSc (Hons) in Mathematics & Computing
- ◆ Bachelor of Business Administration with specialisation in Finance / Marketing / HR / Business Analytics

## Post Graduate (2 Years)

### M.Tech.

- ◆ Bioinformatics (BI)
- ◆ Civil Engineering with specialisation in Construction Management (CM) / Structural Engineering (SE) / Environmental Engineering (EE)
- ◆ Computer Science and Engineering (CSE) OR Computer Science and Engineering with specialisation in Information Security (IS)/ Data Science (DS)
- ◆ Electronics and Communication Engineering (ECE) OR Electronics and Communication Engineering with specialisation in Internet of Things (IoT)

### M.Sc

- ◆ Microbiology (MB)
- ◆ Biotechnology (BT)
- ◆ Physics with specialisation in Nanotechnology / Materials Science / Computational Physics

Note :

1. In M.Sc.(Biotechnology) 10 seats out of total 30 are DBT, Gol supported for GAT-B qualified students.
2. For Course Structures of above programs please refer our website: [www.juit.ac.in](http://www.juit.ac.in)

## Ph.D

Bioinformatics, Biotechnology, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Humanities & Social Sciences, Mathematics, Physics and Materials Science.

## Minor Degree

University offers opportunity to B Tech students to opt for Minor degree in areas other than their main branch. The students, after successfully completing the requirements are awarded a degree in Minor Areas example a student of B. Tech in electronics and Communication Engineering can have Minor degree in Computer Science and Engineering or Biotechnology etc. The conditions for awarding Minor degree are; securing a minimum CGPA of 4.5 and earning the required credit specified for the program of a particular batch along with the additional 20 credit in the minor area as specified.

MAIN BRANCH	AREA OF MINOR SPECIALIZATION
CSE	IT/ECE/BT/CE/BI/Finance/Marketing
IT	CSE/ECE/BT/CE/BI/Finance/Marketing
ECE	BT/BI/CE/CSE/IT/Finance/Marketing
BT	CSE/IT/ECE/CE/BI/Finance/Marketing
BI	CSE/IT/ECE/CE/BT/Finance/Marketing
CE	CSE/IT/ECE/BT/BI/Finance/Marketing
CSE	IT/ECE/BT/CE/BI/Finance/Marketing

## Proficiency Certificate

A B.Tech student will get a Proficiency Certificate in sub-area of the major degree. To be eligible for award of Certificate the student must pass with minimum of 50% or more of B.Tech elective subjects taken from the chosen stream. The conditions for awarding Certificate are; securing a minimum CGPA of 4.5 and earning the required credit specified for the program of a particular batch as specified. The details are available on website of University.

## Degree with Honours

JUIT, Wagnaghat provides B.Tech Degree with Honours to its students who secure a CGPA of 8.00 and above after earning the specified credits for their batch of admission and successfully completing all the requirements of the degree within the minimum period of the program with discipline grade A+ throughout the course of study and completing all courses in first attempt.

## Significant Achievements/Highlights -JUIT

- ◆ NAAC Accredited.
- ◆ Ranked amongst Top Engineering Institutes under National Institutional Ranking Framework (NIRF) by MHRD, GoI for last seven consecutive years.
- ◆ Ranked in Band 801-1000 in Times Higher Education World University rankings 2024.
- ◆ JUIT Ranked in Band 501-600 in ENGINEERING Subject and 601-800 in COMPUTER SCIENCE Subject by Times Higher Education World University Ranking 2024.
- ◆ Ranked in Band 751-800 in QS Asia University Rankings 2024. .
- ◆ Ranked 238 in QS Southern Asia University Rankings 2024.
- ◆ Achieved Gold Accreditation Status from the Global Standardization & Accreditation Agency (GSAAA)
- ◆ Ranked 84 in India by SCIMAGO Institutions Rankings 2023.
- ◆ Ranked in Diamond Band by R World Institutional Rankings -2023 MHW Rankings as a Top Institution for Campus Life.
- ◆ Excellent placement record in all programs.
- ◆ 8th Semester Studies at University of Florida, USA, TAMK Finland, South Dakota Mines – an engineering Technology and Science University, USA & University of Missouri, USA for selected students.
- ◆ First State Private University with the honour of Chancellor of the University being the Governor of Himachal Pradesh
- ◆ NCC Senior Wing for Boys and Girls.
- ◆ 87 percent faculty with Ph.D. from IITs / Universities of repute in India and Abroad.
- ◆ Green and Smart Campus infrastructure architecturally designed by M/s Arcorp, Canada.
- ◆ Wi-Fi enabled campus with 24x7 Water and Electric Supply.
- ◆ Contributed more than 3902 Research Publications, 133 Books and 372 Book Chapters.
- ◆ Organized 33 International Conferences, 250 invited talks, 90 national workshops with around 8,800 plus delegates from India and abroad.
- ◆ Received 115 research grants from various Government Agencies and 28 Patents granted.
- ◆ 30% Tuition Fees concession to Wards of serving and retired Armed Forces and Paramilitary Forces personnel for Undergraduate programs. Additional 5 percent (35%) for Wards of War Widows. 10 percent seats reserved for such categories.
- ◆ 10% seats reserved for students who have passed 12th from State of Himachal Pradesh.
- ◆ 10% seats over and above the intake for direct admission to B.Tech. 2nd year under Lateral Entry Scheme.



# Jaypee University of Engineering and Technology (JUET), Guna, M.P.

(Grade 'A+' Accredited by NAAC and approved by UGC under Section 2(f) of UGC Act 1956)



## Professor Vipin Tyagi

*Dean (Academics & Research), – Jaypee University of Engineering and Technology*

Prof. Vipin Tyagi is a reputed academician and researcher. He is Fellow IETE and member Board of Governors of Engineering Council of India. He is Past President of Engineering Science Section of Indian Science Congress Association and Past

Hon. Secretary, Regional Vice President of Computer Science of India. He is Regional Coordinator of AICTE National Coordination Committee-Induction Program (Central Region). He was nominated by INSA, New Delhi to visit Czech Republic for 2 weeks under scientist exchange program.



## Dr. Sanjay Garg

*Dean-Innovation & Research Jaypee University of Engineering and Technology*

Dr Sanjay Garg is Doctorate in Computer Science and Engineering with 28 years of experience in academics. He is proficient in academic process development using OBE, CBCS and NEP 2020 philosophies with a multidisciplinary approach. He is dexterous with accreditation and Ranking frameworks for Indian

Universities and has proven track record of research and knowledge update with academic leadership. He is also a Recognized Programme Evaluator by ABET(USA) and NBA(INDIA). He is Fellow of Institution of Engineers (India), Senior Member of IEEE and Senior Member of ACM. He is an enthusiast to keep up with current knowledge and impart it to students through a variety of pedagogical methods and developer of impactful academic processes to deliver quality education in overall societal benefit, also he firmly believes in team building and motivating team members to achieve the desired goals.

## About JUET

Jaypee University of Engineering & Technology, Guna has been established vide Government of Madhya Pradesh Gazette extraordinary No. 3 of 2010 dated 29th April 2010 as a private university in the state of Madhya Pradesh (MP) under the provisions of MP Niji Vishwavidyalaya Adhiniyam 2007. The university has been notified by the UGC under section 2(f) of the UGC Act, 1956 and Accredited by NAAC with Grade "A" in its first cycle of Accreditation in the year 2016. In the second cycle, NAAC has accredited the university with A+ grade in the year 2023.

University's location at Raghogarh, in Guna District, is a well thought out vision to serve the central districts of MP such as Shivpuri, Gwalior, Sheopur, Ashok Nagar, Sagar, Rajgarh, Vidisha etc. However, being in a state at the centre of the national map, JUET is an attractive and convenient destination for the students from surrounding states sharing the borders like Uttar Pradesh, Chhattisgarh, Maharashtra, Gujarat and Rajasthan, and also for the students of far-away states. The university boasts the rich regional diversity of the students on its campus. This region is although in a rural setting with strong agricultural activities, but is growing as a major eco-industrial hub especially due to recently constructed four-lane Agra-Mumbai national highway. JUET has been developed as a major center to provide competent, well trained technical and well-rounded manpower in the region.

The University campus sprawls over 122.5 acres as a modern institution of higher learning in the field of engineering and technical education.

The academic activities started in the year 2003. Presently, the university offers programs of three faculties named as Faculty of Engineering, Faculty of Mathematical Sciences and Faculty of Sciences. Its young alumni have made a mark all over the



world in diverse spheres.

The University has a modern well laid out and green campus with fully equipped state-of-the-art laboratories and library, which provides a pleasant and intellectually stimulating ambience for students in eco-friendly environment. Special emphasis has been laid on developing an atmosphere highly conducive for

- ◆ Building a strong foundation of knowledge
- ◆ Confidence building
- ◆ Pursuit of excellence and self discipline
- ◆ Personality development
- ◆ Incultation of creativity through motivation and drive, which helps to produce innovative professionals well equipped for the rigors of emerging challenges of professional and social life.

The University offers the complete educational spectrum of programs in emerging technologies at the degree levels. Research in emerging areas of technology is a major thrust and is leveraged for all academic pursuits

## Programs of Study

### Undergraduate (4 Years)

#### B.Tech.

- ◆ Computer Science & Engineering
- ◆ Electronics & Communication Engineering
- ◆ Mechanical Engineering
- ◆ Chemical Engineering
- ◆ Civil Engineering

For details visit <https://www.juet.ac.in/Course/Specialization.php>

University also admits students in above programs directly into 2nd year (3rd semester) through lateral entry for diploma holders/ B Tech or BE after 1st year/ working professionals having prescribed eligibility as per AICTE guidelines.

### Post Graduate (2 Years)

#### M.Tech.

- ◆ Chemical Engineering (specialization also available in Energy and Environmental Engineering)
- ◆ Computer Science & Engineering (specialization also available in AI & DS/ AI & ML)
- ◆ Electronics & Communication Engineering (specialization also available in Microelectronics and VLSI design/ IOT)
- ◆ Mechanical Engineering (specialization available in Manufacturing Technology/ Machine design/ Renewable Energy)
- ◆ Civil Engineering (specialization available in Structural Engineering/ Environmental Engineering/ Construction Management)

#### M.Sc (2 Years)

- ◆ Mathematics ◆ Physics ◆ Chemistry

## Ph.D

Chemical Engineering, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Mechanical Engineering, Mathematics, Physics and Humanities & Social Sciences.

## Specializations and Micro-Specializations

University offers opportunity to B. Tech. students for specialization in an area within their main branch and also in other than their main branch. Students are required to earn additional 18 credits in the chosen area of specialization.

University also offers opportunity to B. Tech. students for micro-specialization in a chosen area of their main branch. No additional credits are required to earn for the micro-specialization. For details visit <https://www.juet.ac.in>

## Wind Engineering Application Centre (JP-Wincentre)

A state-of-the-art Boundary Layer Wind Tunnel facility (BLWT) viz. Wind Engineering Application Centre (JP-WINCENTRE) has been established at the University to train students in wind engineering and give innovative solution to industrial wind engineering problems. JP-WINCENTRE focuses on simulating the wind flow effect on structures under which their aerodynamic behavior is analyzed. Construction of tall buildings and structures, such as residential, commercial and power plant structures which are highly susceptible to dynamic wind forces requires wind tunnel testing. To cater to the need of academia and industry the JP-WINCENTE is functioning as a Centre of Excellence in the University.



## Significant Achievements/Highlights -JUET

- ◆ NAAC accredited university with A+ grade
- ◆ Faculty members with more than 14 years of average teaching and research experience.
- ◆ About 95% faculty members with Ph.D. degree from reputed institutions of the country like IIT, NIT, etc
- ◆ A large base of 6851 alumni including 120 Doctoral
- ◆ Participation in Study in India Program of MOE, GOI for admission of foreign students. (Opportunity available to NAAC A+ grade and NIRF ranked Institutions only)
- ◆ Has Institution Innovation Council (IIC) to promote Innovation and Entrepreneurship culture among students and faculty supported by MOE's Innovation Cell, GOI since 2020
- ◆ "Best Accredited Student Branch Award" by Computer Society of India (CSI) in 2017
- ◆ Hosted "Toycathon -21" as Nodal Center in 2021
- ◆ Participation in Smart India Hackathon, MOE, GOI
- ◆ Participation in Atal Ranking of Institutions on Innovation Achievements (ARIIA), an initiative by MOE's Innovation Cell, GOI
- ◆ Option available for B Tech students to complete 8th semester study at University of Florida through credit transfer program
- ◆ Credit transfer available for the MOOC courses from NPTEL and SWAYAM, MOE, GOI
- ◆ Deposition of students' certificates in NAD and Digi Locker of MeitY and MOE, GOI respectively
- ◆ 11 National/International Conferences, 31 National/International workshops, 23 Short Term Courses, around 2500 delegates attended, 185 invited talks delivered by experts from around the world and number of FDPs organized
- ◆ Published more than 1460 Research papers, 80 Books and Book Chapters
- ◆ 43 Patents published
- ◆ Research Grants from various government agencies
- ◆ MOU with important institutions of the country like CBRI, Roorkee, MNNIT Allahabad, University of Lucknow, RGIPT, Amethi, MP council of Science and Technology, Bhopal, etc. and with Infosys for collaborative research and training
- ◆ Completely networked campus with NKN (National Knowledge Network), BSNL, Airtel and Reliance JIO
- ◆ Recognized Social Entrepreneurship, Swachhta & Rural Engagement Cell (SES REC) Institution
- ◆ Received "Green Champion Award" from "MGNCRE" - Ministry of Education- Govt. of India in 2021
- ◆ Special appreciation for carbon positive campus
- ◆ Participation in Unnat Bharat Abhiyan (UBA) of MOE, GOI. Five villages adopted under UBA for their development
- ◆ Participation in Swachh Bharat Abhiyan of MOE, GOI
- ◆ State- of- the- art students' Annapurna Mess graded with 5 Star rating by Govt. of India – Food Safety and Standards Authority of India
- ◆ Successful campus placement of graduating students in more than 300 companies offering more than 100% placement (offer-wise) every year. To name a few reputed companies visiting for campus placements are Amazon, Google, Grab, Zeta, Flipkart, Goldman Sachs, InterviewBit, One Direct, ZS Associates, Inframarket, Nference, OYO, Convegenius, Make My Trip, Infosys, Cognizant, Wipro, SAP Labs, Oracle, IBM, Dell, NEC, Ericsson, Ernst & Young, Kuliza Technologies, Naukri.com., HCL Technologies, Tech Mahindra, Trident, Adani Wilmer, Liugong, Sanghi Cement, Shree Cement, UltraTech, Continental Automotives, Browser Stack, Minzar, NIRMA Group, JK Cement, Ambuja Cement, Wonder Cement, Mangalam Cement Ltd, JMC, Bosch, L&T, Bridgecon Infra, Supertech, DBL, Kalpataru, Various companies of Jaypee Group and others
- ◆ Highest Package Offered: - Rs. 44 Lac per annum in 2023 by Amazon





# Jaypee University Anoopshahr, Bulandshahr, U.P

(Established by Government of Uttar Pradesh under Private Universities Act No. 8 of 2014)

Jaypee University Anoopshahr is a multidisciplinary University established in 2014, by the Govt. of U.P. Act No. 8 of 2014. The University is set up in about 95 acres of lush green environment on the banks of holy river Ganga in Anoopshahr, district Bulandshahr, U.P., India (About 100 km from Delhi). The University offers programs in Engineering, Computer Applications, Sciences, Management, Arts, and Commerce with an aim of providing an excellent educational experience to students. .

## Programs of Study

### Faculty of Engineering & Technology

- ◆ **B.Tech** (a) CSE (b) Robotics
  - ◆ **B.Sc** (a) Mathematics (b) Physics (C) Zoology, Botany, Chemistry
  - ◆ **B.Com** ◆ **B.A** ◆ **BBA** ◆ **BCA** ◆ **MBA** ◆ **MCA**
  - ◆ **Diploma in Electronics and Computer Engineering**
- **Educational Philosophy:** The University aims to groom high-quality professionals capable of addressing global challenges and industrial needs through multidisciplinary education. The focus is on developing students' curiosity and discipline specific competencies along with skills in complex problem-solving, critical thinking, innovation, communication, teamwork, and leadership.
  - **Faculty Quality:** The faculty-student ratio is excellent, and the faculty members are highly qualified, often educated and trained at prestigious Indian institutions such as IITs, NITs, and Central Universities. Our faculty members actively engage the students in research.
  - **Active and Experiential Learning:** Emphasis is placed on active and experiential learning from the very beginning of the program, encouraging "learning by doing" and "learning by building."
  - **Curriculum Flexibility:** The curriculum is highly innovative and flexible, allowing students to choose from a wide range of electives to tailor their education according to their interests and career goals. All programs integrate suitable computing and other technologies to equip students with relevant skills and knowledge for the future workforce.

- **Placement Opportunities:** Over 250 companies including many leading MNCs regularly offer excellent placement opportunities through a common T&P Unit of the Jaypee Universities.
- **Infrastructure:** The campus boasts fully equipped and updated infrastructure, including labs, workshops, library, Digital Learning Centre, hostels, cafeteria, Gymnasiums, faculty and staff residences, medical facility, uninterrupted power supply, Wi-Fi, CCTV supported security, etc.
- **Supercomputing facility:** Students have remote access to supercomputing facility installed by the Jaypee Education system at the Ramanujam Universe, Noida.
- **National and International Collaboration:** The Jaypee Higher Education System has partnerships with renowned institutions worldwide, facilitating student exchanges, joint research ventures, and faculty collaborations to promote global perspectives and cross-cultural learning. Many leading luminaries are supporting the University as advisors.
- **Industry Partnerships:** Through various industrial ties, students benefit from hands-on experience, internships, and projects.
- **Entrepreneurship Support:** The University nurtures aspiring student entrepreneurs, providing mentorship and incubation facilities to turn innovative ideas into successful ventures.

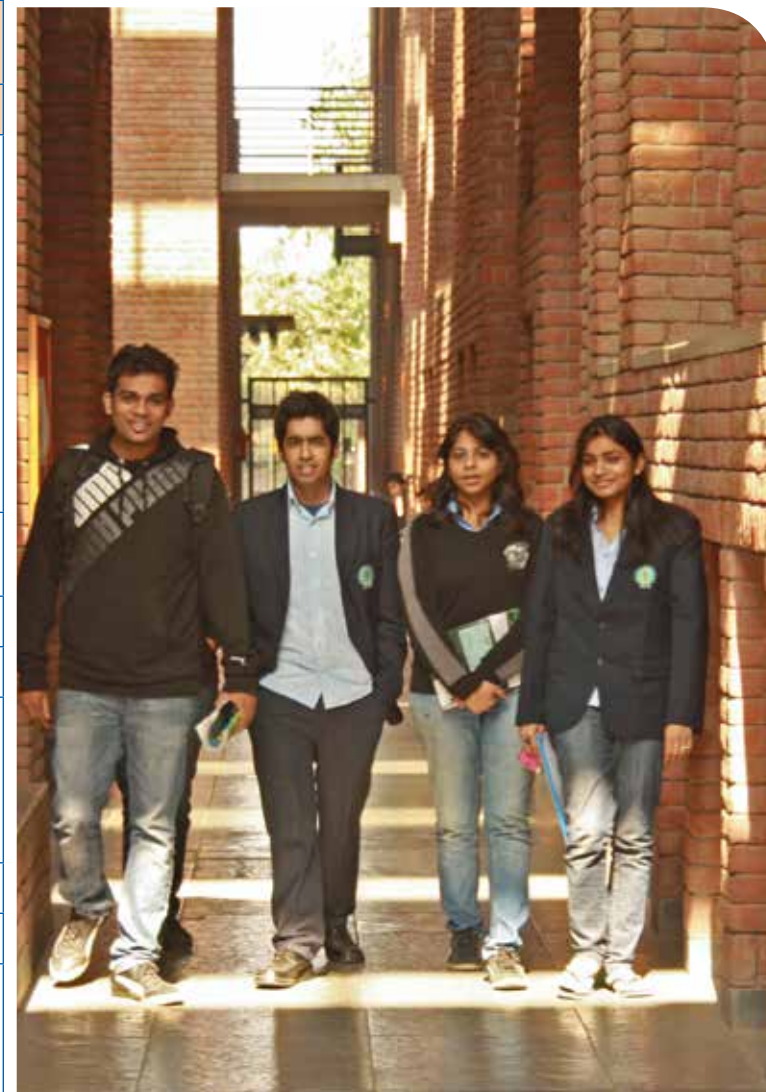


- **Alumni Network:** The University facilitates access to the huge network of alumni of Jaypee Universities. Some of the most successful senior alumni of older Jaypee Universities are also supporting the University as professional advisors.
- **Community Engagement:** Students are encouraged to actively participate in community service initiatives, volunteering projects, and social impact endeavours.
- **Environmental Sustainability:** Our campus is a beacon of sustainability, featuring green initiatives, eco-friendly infrastructure, and sustainability education.
- **Professional Development Programs:** Students have access to workshops, seminars, and certification courses designed to enhance their employability.
- **Sports and Extracurricular Activities:** The University provides good sports facilities and a wide range of student-led extracurricular activities, catering to various interests.
- **Transportation:** Transportation facilities are available for day-scholars on selected routes, and the University is well-connected by road to Delhi, Noida, Ghaziabad, Meerut, Aligarh, Bulandshahr, Moradabad, Sambhal, Badaun, Hapur, Amroha, etc.
- **Affordable excellence:** Being the hometown of our revered founder Sh. Jaiprakash Gaur ji, AnoopShahr is very close to his heart. He has sponsored various development projects including several schools, hospitals, temples, Gangaghat, ITI, etc., in this region. Jaypee University is his biggest initiative having a long term objective of "Shiksha se Samriddhi," i.e., to significantly enhance economic prosperity of this region through education. Supported by a high subsidy from the Jaypee group, the University offers excellent education and career pathways to students at a highly affordable cost.



# UG Programs 2024-25

Program/Total No. of Seats	JIT-Noida (Sec. 62 & 128)	JUIT-Waknaghat, H.P.	JUET-Guna, M.P.	JU-ANOOPSHAHR, U.P.
	1500	660	600	
<b>B.Tech Disciplines offered (Seats)</b>	CSE (780) ECE(240) IT(120) BT (60) ECM (120) EE(VLSI) (60) EC(ACT) (60) M&C (60)	BT(30) BI(30) CE /CEC(60) CSE(450) IT(30) ECE/ECS(30) EEV(30)	CSE (390) ECE (60) CE (60) CHE (30) ME (60)	CSE Robotics
<b>Integrated M.Tech</b>	CSE(30), ECE(30), BT (30)	-	-	
<b>B.B.A</b>	240	30	-	B.B.A
<b>B.C.A</b>	120	-	-	B.C.A
<b>B.Sc</b>	Computer Science (30)	Mathematics & Computing (30)	-	Mathematics Physics Zoology-Botany- Chemistry
<b>B.A</b>	-	-	-	B.A
<b>B.Com</b>	-	-	-	B.Com
<b>Diploma</b>	EE (Microelectronics) (30) Food Technology (30) Computer Science & Information Technology (30)	-	-	Electronics & Computer Engineering



# UG Programs

## Computer Science and Engineering (JIIT, JUIT & JUET) & Information Technology (JIIT & JUIT)

Departments of Computer Science and Engineering & Information Technology offer two UG programs, namely B.Tech. in Computer Science & Engineering and B.Tech. in Information Technology.

The UG curriculum of CSE & IT, standing on elements of research and design, is updated on regular basis to include areas of current relevance in the field of Computer Science & IT. Currently, compelling areas like Data Analytics, Cloud, Fog and Edge Computing, Big Data Technologies, Cyber Security, Internet of Things, Artificial Intelligence and Machine Learning, Block chain and latest development in software processes like DevOps and Kubernetes, are part of one or more subjects in the curriculum.

Large number of electives offers to a student to choose subjects according to their interests and future plans. Core and choice based interdisciplinary electives in almost every semester provide avenues to understand the way computer science can benefit from other disciplines and vice-versa. Besides regular credit based subjects, students can earn a certificate of proficiency through value added courses and workshops for reinforced learning in the areas of importance.

Teaching pedagogy lays heavy emphasis on programming skills nurtured through contemporarily designed laboratory courses and major/minor projects. Learning in practical subjects is facilitated by well-equipped laboratories while being continuously supported by faculty members, Ph.D. and M.Tech.(teaching associates) as well as fourth year B.Tech students as mentors.

Most of the faculty members of the department are doctorate in the emerging areas of Computer Science and IT. Department has strong programming culture, and thus students are performing at not only national level, but at international level also at various world class programming platforms like Code Chef, GSoC internships and many more.

Department regularly organizes co-curricular technical activities like online programming competitions, Hackathons, Robotics hub, Google Developer Group workshops and graphic designing workshops etc. This gives JIIT-CSE & IT students

an edge over other undergraduates and postgraduates students. IT giants like Amazon, Adobe, Google, D.E. Shaw, Morgan Stanley, Deloitte, SAP & many others are regular recruiters. It's worth mentioning here that the number of companies offering package more than INR 10 Lac per annum (LPA) is increasing every year.

On an average, approximately 130 companies visit JIIT to recruit IT professionals every year.

Apart from strong industry driven curricula, department has strong research environment.

CSE & IT UG students can earn a Minor degree in other discipline if they take 18 credits in addition to their regular CSE & IT credits or Honours Degree with Specialization in some emerging Areas if they take 18 credits in addition to their regular CSE & IT credits . There is also a provision of earning a Proficiency Certificate. It helps students to become more employable in the industry. There are a number of departmental electives in the UG curriculum. If a student takes more than 5 electives of certain area, along with major and minor projects in that area, and earns a good grade, he/ she will be awarded an additional certificate of proficiency in that area.

Students are provided ample opportunities to develop and demonstrate their innovation and design skills through co-curricular technical activities like online programming competitions, hackathons, Robotics hub, Google Developer Group workshops and graphic designing interest group among others.

As a result of all these exposures, student projects quite often lead to research publications in leading journals and conferences.

Some of the core subjects of the programs include Object Oriented Programming, Computer Organization and Architecture, Smart Systems, Micro Processors & Controllers, Algorithms, Operating Systems, Software Engineering, Computation Theory, Computer Networks and Compiler Design. Students have to undergo a



through six-week mandatory industrial training at the end of their third year of study to get a feel of the work culture in relevant industries.

It's the result of all these concerted efforts that the placement statistics are very enthusiastic and eligible students get job offers through campus placement.



## Electronics and Communication Engineering (JIIT, JUIT & JUET)

“The latest technology today is an obsolete technology tomorrow.” The quote is apt and relevant as the world of technology in Electronics and Communication industry is changing very fast and has undergone tremendous transformation. The technology landscape in 21st century necessitates innovation and excellence. This, precisely, is what Departments of Electronics and Communication Engineering (ECE) is about. Electronics and Communication Engineering discipline spans a diverse set of intellectual sub-fields and applications. The sub- fields can be grouped in to overlapping and interrelated areas like Signal and Image Processing, Semiconductor Device Design, Communication Systems, Data Communication Networks, Microwave and Antenna Design, Internet of Things, Wireless Communication, Microelectronics, Embedded Systems, VLSI Design, Machine Learning and many more. The students undertake courses in Basic Sciences, Mathematics and Humanities as well. Also, major and minor projects during the semesters help the students in transforming their theoretical knowledge to practical applications.

Flexibility of opting for several elective subjects provide a wonderful opportunity to the students to broaden their knowledge and to obtain proficiency certificate in various specialized areas of Electronics and Communication Engineering. Students can also opt for Minor Specialization in other branches of Engineering like Computer Science and Engineering, Information Technology, Biotechnology etc. by opting for some extra credits.

The program is fully supported by excellent laboratories for all the core courses like Electrical Science, Communication Systems, Digital Electronics, VLSI,

Electromagnetics, Signal Processing etc. and some advanced laboratories such as Machine Learning, IoT, Embedded systems and Robotics under e-Yantra sponsored by MHRD. These labs are equipped with state-of-the-art instruments and software tools to enable students to perform, simulation, fabrication and testing of their experiments and projects. Students can also participate in various technical activities through IEEE student chapter and can involve in Creativity and Innovation Cell (CICE) activities.



## Biotechnology (JIIT, JUIT)

The advent of 21st century witnessed the scope of biotechnology broaden with every passing year, with the realization of its potential to advance life and health for the best. The Indian Biotech industry, currently valued at \$64 bn, is expected to reach a massive \$150 bn target by 2024. To address the demands of the continuously evolving technology and industry, our curriculum is designed to prepare our students as prominent contributors to the field of Biotechnology (BT) and Bioinformatics (BI), imparting them with skill-sets that enable their adaptation to academia, research, and industry.

Realizing the interwoven nature of the field of Biotechnology, our curriculum is aimed to enhance the expertise of our students by rigorously indulging them in project based learning, aided by our available specialized labs and faculty mentoring in areas such as Proteomics & Genomics Technologies, Nanobiotechnology, Antimicrobial Resistance, Animal & Plant Cell Culture, Fermentation & Downstream Processing, Molecular Diagnostics, Disease & Healthcare, Pharmacogenomics, Biosensors, Bioeconomics and Waste Management. We further aim to develop and recognize student's proficiencies in the fields of Industrial Biotechnology, Medical Biotechnology, Plant and Microbial Biotechnology, Bioinformatics, Environmental Biotechnology and Food Biotechnology. Interaction with leading scientists from academia and industry through invited lectures, workshops and conferences ensures overall progress and enhancement of the student's technical skills.

The research emphasis is reflected by our active doctoral program, peer reviewed publications in international/national journals, and sponsored research projects from premier national funding agencies, namely, the Department of Biotechnology (DBT), the Department of Science and Technology (DST), All India Council for Technical Education (AICTE), Indian Council for Medical Research (ICMR), Council of Science and Technology, Uttar Pradesh (UPCST), Ministry of Environment GOI, Department of AYUSH etc.



## Civil Engineering (JUIT, JUET)

The undergraduate program in Civil Engineering (offered at JUIT-Waknaghat and JUET- Guna) has been developed to meet the latest requirements of the infrastructural development of our country in areas like Construction, Transportation, Hydro-power and Environmental Engineering. The curriculum has been developed to keep it more practical and industry-oriented without compromising on its academic rigor. Students are provided with comprehensive theoretical knowledge through lectures, tutorials and assignments covering the basic as well as advanced topics in various subjects of Civil Engineering. They are trained for practical understanding in departmental laboratories namely Concrete and Structural Engineering, Geo-technical Engineering, Environmental Engineering, Highway Engineering and Surveying, in addition to the traditional Engineering Graphics and Workshop Practices. All laboratories are equipped with modern equipment and facilities with highly trained manpower. Students are exposed to the construction industry during practical training in reputed construction companies. Training on software like STAAD Pro, MATLAB, Auto-CAD and PRIMAVIRA enhances the employability of students in the various fields of Civil Engineering. Opportunities are provided to students for post-graduation and research in the areas of Geo technical, Structural, Environmental and Transportation Engineering.

## Civil Engineering with Computer Application (JUIT)

The field of Civil Engineering is presently experiencing a phenomenal change. A present day Civil Engineer needs to have all the appropriate skills and ready knowledge to work in a corporate or site environment. Rapid advances in the field of computer science (both hardware and software) have provided all engineers with powerful medium of data processing, storing and display engineering outputs. 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, bearing capacity and slope stability determinations, use of machine learning in identifying hydrological responses in a catchment after precipitation and many more such applications. The Department of Civil Engineering offers cutting-edge interdisciplinary 4-year B.Tech. degree programme in Civil Engineering with Computer Application, which is a new emerging trend. The purpose of this programme is to produce undergraduates who are fully prepared to work in an engineering position requiring expertise in the field of Computer application so as to apply the same in Infrastructure Industry.

## Electronics and Computer Science (ECS) (JUIT)

Department of Electronics and Communication is introduced with an increasing demand for engineers with good programming skills, new developments in the industry and increased use of new technologies, such as, Artificial Intelligence, Machine Learning, Internet of Things, Embedded Systems and Robotics. This nomenclature is proposed by keeping in mind the recent trends in the industry. As the demand for knowledge of computer- based courses is increasing, the subjects from Electronics & Communication Engineering as well as Computer Science Engineering are included. Also, the topics included in various competitive examinations of ECE and CSE are incorporated.

## Electronics and Computers Engineering (ECM)(JIIT)

B.Tech in Electronics and Computer Engineering at Jaypee Institute of Information Technology (JIIT) will be designed to provide comprehensive knowledge in two important subject areas Electronics and Computer Science. The primary advantage of this hybrid program is that it prepares future engineers who are acquainted with both the hardware and the associated software/programming concepts aligned with the current requirement in industries. As a by-product it will enhance the employability opportunities for the students. The program will combine the coursework in different aspects of electronics engineering and computer science. Students can develop new technologies, for many applications such as healthcare, surveillance, communication,

early disaster warning, education, entertainment, multimedia, virtual reality, human computer interface etc. In essence, this programme will give students an opportunity to develop knowledge of both the fields over a period of four years.

The major highlights of the programme will be:

- Crossover courses of Electronics (hardware) and Computer Science (software) basics
- Intensive programming courses in pre-final year and final year electives
- Opportunity to do interdisciplinary minor and major projects.
- Program will give edge to the students willing to pursue a future in IoT, 5G, AI, Embedded Systems and related fields.

## Computer Science & Engineering with specialization in AI-ML (JUIT)

Artificial intelligence (AI) is a broad field, which refers to the use of technologies to build machines and computers that have the ability to mimic cognitive functions associated with human intelligence, such as being able to see, understand, and respond to spoken or written language, analyze data, make recommendations, and more. Machine learning is a subset of artificial intelligence that automatically enables a machine or system to learn and improve from experience. Instead of explicit programming, machine learning uses algorithms to analyze large amounts of data, learn from the insights, and then make informed decisions. While AI and ML are not quite the same thing, they are closely connected. The simplest way to understand how AI and ML relate to each other is: AI is the broader concept of enabling a machine or system to sense, reason, act, or adapt like a human, while ML is an application of AI that allows machines to extract knowledge from data and learn from it autonomously.

## Bioinformatics (JUIT)

Bioinformatics has emerged as a separate discipline due to an upsurge in genomics data through sequencing of whole genomes of microbes, plants, animals and human.

Anticipating high demand of technocrats with knowledge base of a combination of biotechnology and CS & IT, a specialized degree program B.Tech. Bioinformatics(BI) is offered. The multi-disciplinary nature of Bioinformatics involves in-depth knowledge in Biotechnology, Computer Science Engineering & IT, Mathematics, Biostatistics, Physics, in addition to core subjects such as Pharmacogenomics, System Biology and Neural Networks, Comparative and Functional Genomics, Clinical Trials, and Machine Learning Tools in Bioinformatics.

## Computer Science & Engineering with specialization in AI-DS (JUIT)

Data science is an interdisciplinary field that combines expertise from statistics, computer science, and domain knowledge to extract valuable insights and knowledge from structured and unstructured data. It encompasses a range of techniques, including data cleaning, data preprocessing, data visualization, and machine learning algorithms. Data scientists play a pivotal role in understanding complex data patterns, making data-driven decisions, and predicting future trends. While data science and AI are closely related and often used together, they are not the same. Data science is a broader field that involves extracting insights from data using various techniques, including AI. On the other hand, Artificial Intelligence (AI) is a specialized field within computer science dedicated to developing machines with the capability to perform tasks that would typically necessitate human intelligence.

## Computer Science & Engineering with specialization in Cyber Security (JUIT)

Cyber security is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks. It's also known as information technology security or electronic information security. The term applies in a variety of contexts, from business to mobile computing, and can be divided into a few common categories.

## Computer Science & Engineering with specialization in UI-UX Design (JUIT)

UI/UX design aims to create a positive user experience that encourages customers to stick with a brand or product. While a UX Designer decides how the user interface works, the UI designer decides how the user interface looks. This article is a comprehensive guide on how to become a UI UX Designer and discusses other relevant topics related to the UI UX field.

## Computer Science & Engineering with specialization in Business Systems (JUIT)

Business system decides how data must be handled and is methodically processed. It also controls the procedures of the processed data and the results to be displayed. For e.g., a system may automatically order parts for an inventory, monitor future corporate profits or post credit card sales to the on-line customer accounts. The overall nature of the business system will reflect the efficiency of its designers.

## Computer Science & Engineering with specialization in Full stack software development (JUIT)

A full-stack developer is a developer or engineer who can build both the front end and the back end of a website. The front end (the parts of a website a user sees and interacts with) and the back end (the behind-the-scenes data storage and processing) require different skill sets. Since full-stack developers are involved with all aspects of the development process, they must have expertise in both. A full-stack developer can work in-house or at a computer development company that engineers websites, software, and other components for other businesses.

## Chemical Engineering (JUET)

The objective of this program is to provide the students a broad-based education with emphasis on theory and practice of chemical engineering keeping in view, the current and future requirements of the country. The courses offered, aim at preparing trained manpower to meet the demand in the process industries including cement, food processing, petroleum processing, pharmaceuticals, mineral processing and polymers besides design, development & trouble shooting. Graduates have been placed successfully in reputed organizations like NOCIL, Hindustan Lever, Jaypee Group, IOCL, Reliance, DMCC, KJS Cement, APAC Consulting etc.

Nine fully equipped state-of-the-art laboratories with air/water/steam lines are available to students. The course syllabus is flexible and includes all components of modern engineering education with wide choice of electives from areas like design, analysis, modelling, energy and environment.

## Electronics Engineering (VLSI Design & Technology ) (JIIT, JUIT)

Department of Electronics and Communication engineering has introduced new bachelors degree programme in the specialized are of VLSI Design and Technology keeping in view the future demand of VLSI Design Engineers. The course curriculum has been designed in accordance with the AICTE curriculum model with the development of state-of-the-art laboratories. This programme will enable the students to pursue their career in semiconductor industry and in research and development as well.

## Mechanical Engineering (JUET)

Mechanical Engineering is offered by the Department of Mechanical Engineering JUET-Guna. The department has established laboratories like Thermodynamics, Computer Aided Design, Strength of Materials, Fluid Mechanics & Machinery, Measurement & Control, Theory of Machine, I.C. Engines, Heat & Mass Transfer, Advanced Machining, Refrigeration & Air Conditioning, Dynamics of Machines, Additive Manufacturing



(AM) and CIMS, 660MW Super Critical Thermal Power Plant Training Simulator (at JUET) for hands on experience in practice and design. It lays emphasis on subjects like Flexible Manufacturing Systems, Computer Integrated Manufacturing, Additive Manufacturing, Robotics, Tribology, Composites and Laser Materials, Finite Element Methods to provide the graduates to take up the challenging tasks for leading sectors of manufacturing, design and energy generation & conservation and R & D and provides adequate exposure for hands on experience

### **Mathematics & Computing (M&C) (JIIT)**

The Bachelor of Technology program in Mathematics and Computing at JIIT Noida is a cutting-edge interdisciplinary course designed to address the evolving challenges in the modern world. The curriculum for this course emphasizes the symbiotic relationship between mathematics and computer science, recognizing their crucial role in solving complex problems across various fields. This four-year program focuses on the foundational aspects of computer science and mathematics, acknowledging that algorithms, the cornerstone of computer science, can be enhanced and optimized through mathematical techniques. The department aims to produce graduates with a strong mathematical foundation and practical computing skills, offering opportunities for specialization in areas such as computational mathematics, computer science, artificial intelligence, and more.

The curriculum is aptly updated to incorporate current trends, ensuring exposure of students to the demanding topics such as data analytics, cloud computing, cyber security, artificial intelligence, quantum computing, etc. The program provides flexibility with a range of electives, allowing students to tailor their education to align with their interests and current industry requirements. Additionally, students can enhance their learning through projects and value-added / skill enhancement / ability enhancement courses. The teaching pedagogy significantly emphasizes programming skills, with well-equipped laboratories and mentorship from experienced faculty members. The program aims to foster a strong programming culture, aligning with the technological demands of the industry.

Graduates of the Mathematics and Computing program will be well-prepared for diverse career paths, including roles in education and the IT industry. The interdisciplinary nature of the program ensures that students acquire a solid foundation in mathematics, statistics, and computer-related subjects, empowering them to tackle challenges in fields such as healthcare, agriculture, security, banking, finance, etc. The comprehensive training provided by dedicated faculty members and the utilization of mathematical software positions graduates to contribute to innovative computational solutions in various domains, making them valuable assets in both academia and industry.

### **B.Tech. – Robotics (JUA)**

A Bachelor of Technology (B.Tech) program in Robotics offers a unique blend of engineering principles and cutting-edge technology focused specifically on the programming, machine learning, design, development and implementation of robotic systems. This interdisciplinary field requires integration of Computer Science, Mechanical Engineering, and Electrical & Electronics Engineering along with Social Sciences.

Students in this program delve into subjects such as programming, algorithms, robotics fundamentals, control systems, artificial intelligence, computer vision and mechatronics. With hands-on experience in designing and programming robotic systems, graduates of B.Tech in Robotics programs are well-prepared for a range of career opportunities. They can pursue roles in industries such as manufacturing, automotive, healthcare, aerospace, defense and even entertainment.

Career paths may include robotics engineer, automation engineer, robotics software developer, research scientist, technical consultant or project manager. The interdisciplinary nature of robotics equips graduates with a diverse skill set including problem-solving abilities, programming proficiency and a deep understanding of robotics technology, positioning them for success in this exciting and rapidly growing field.

### **B.Sc. (Computer Science) (JIIT)**

This undergraduate programme based on the new education policy (NEP 2020) and is well designed to enrich the knowledge of mathematics, computer science and emerging software tools through highly qualified faculty and state of the art computer laboratories. The programme lays emphasis on building a strong mathematical foundation and includes modules on electronics and humanities as well. Projects, summer training and internship will develop the communication, problem solving, team work and leadership skills to meet the requirement of the industries/organizations. After successful completion of the programme, students will be specialized enough to start a career as an entrepreneur or may join the software industry as software engineer, data scientist, system analyst, network administrator etc. The programme also provides excellent opportunities for higher studies.

### **B.Sc. (Hons.) in Mathematics & Computing (3 Years) (JUIT)**

This three years program aims to provide in depth theoretical basis in mathematics and practical training in computer science. It also covers a variety of multidisciplinary topics such as Financial Engineering, Numerical Computing, and Intelligent Machine. Graduate of the program are prepared for advanced degrees and career in a wide range of industrial discipline.

## B.B.A (3 Years) (JIIT in JBS/JUIT)

The 3 year full time BBA curriculum is imaginative and flexible and is comprised of creative combinations of disciplines of study. Innovative and stimulating pedagogical practices stimulate the students' learning experience. The BBA program aims at developing in the students a set of broad based competencies, an understanding of the social and human context and instill in them strong ethical values. The broad goal of the BBA program is to provide the students multi- disciplinary education that provides learning in multiple disciplines along with in depth knowledge of the management discipline. In this way the students are prepared to deal with complexity, diversity and change. Value added courses on communication, analytical and problem solving skills and theatre equip the students with the ability to apply knowledge and skills in the real world settings.

Successful graduates of this course can opt for a range of jobs from sectors like finance, marketing, sales, management, government, HR, data analytics, health and education.

The curriculum of this 3 year undergraduate BBA program is designed with the options of specialization in Finance, Marketing, HR, IT Applications in Management and Data Analytics. The curriculum spread over six semesters with each semester having sixteen weeks that includes teaching and evaluation.

Last two semesters of the programs makes provision for choice of discipline specific electives for specialization.

Two important stages of learning apart from acquiring knowledge is practicing and performing and it is these two aspects that JBS/JUIT focuses on. Learning by doing is the norm wherein the students apply theoretical knowledge in real world to generate tangible outcomes.

## Bachelor of Computer Application (JIIT)

Bachelor of Computer Applications (BCA) -The department of Computer Applications (CA) offers three/four year BCA program with an option to specialize in AI&ML, Cyber security and Data Analytics. BCA Curriculum is well designed to align with industry standards and best practices consisting of core courses, elective courses and dissertation/ project. BCA program focuses on computer applications and software development wherein graduates develop both core theoretical and hands on practical knowledge in promising areas of computing like Software Development, System and Network Administration, Database Management, Cyber security, Cloud Computing Data Analysis and Machine Learning, Web Development and User Interface Design etc. Students are exposed to real-world scenarios and are encouraged to develop

applications, work on software projects, and gain practical experience. With the increasing reliance on technology, there is a high demand for skilled IT professionals and BCA graduates are well positioned to meet this demand and contribute to various industries. The graduates from this program, especially those with strong technical skills and relevant experience, can command attractive compensation packages. They can also pursue postgraduate degrees like Master of Computer Applications (MCA) or Master of Science (MS) in Computer Science to delve deeper into research areas and contribute to academic or industrial research projects. Additionally, one can participate in research and development activities within organizations or collaborate with research teams on technology driven projects or can explore entrepreneurship opportunities by starting one's own software development or IT consulting businesses.



# Diploma Programs

## Computer Science and Information Technology (JIIT)

The Diploma in (Computer Science and Information Technology) programme at the Jaypee Institute of Information Technology is a specially designed programme for those who have passed class 10 examination & wants to pursue career in the computer science and Information technology area. The program aims to fill the existing void of skilled workforce who wants to start their career at an early stage. Diploma in Computer Science and Engineering (CSE) is a specialized program that focuses on the fundamental concepts of computer science and engineering principles. This programme covers topics such as programming languages, algorithms, data structures, computer architecture, software engineering, networking, database management, and more. Students will get opportunity to know and practices basics of several technological trends like Data Analytics and Data Science, Artificial Intelligence and machine learning, Big Data, Cloud Computing, Blockchain , IOT and Smart systems etc. Students will be able to take industrial internships during the programme that will allows the students to have industrial exposure. Some salient features of the programme include a wide range of electives that enables the students to pursue a given specialization, several courses based on Project based learning, Major & Minor Projects & hands-on of technological advancements in the state-of-the-art labs of JIIT, Noida.

## Electronics Engineering – Microelectronics (JIIT)

The Diploma in Electronics Engineering (Microelectronics) is a three-year diploma program that is designed to train in accordance with the requirements outlined by AICTE. The program is aligning seamlessly with the objectives outlined in the India Semiconductor Mission. This program is designed to address the growing demand for skilled professionals in the semiconductor and microelectronics sector, a key focus area of the mission. By providing a comprehensive curriculum covering electronic circuits, semiconductor devices, and microprocessor systems, our diploma program contributes directly to building a workforce adept in cutting-edge technologies.

The hands-on laboratory work and emphasis on industry trends foster an environment where graduates are well-equipped to contribute to the semiconductor industry's growth in India. This initiative aligns with the mission's goal of fostering innovation, research, and development in the semiconductor domain, thereby making a significant impact on India's position in the global electronics market.

## Food Technology (JIIT)

The diploma program offers a blend of theoretical knowledge and practical skills to prepare students for a career in the dynamic field of food technology providing comprehensive technical knowledge in the field of food processing, packaging and preservation. The course focuses on developing problem-solving capabilities and practical skills. The emphasis on industrial exposure, entrepreneurship, and project work adds a practical dimension to the learning experience, aligning it with the requirements of the food industry.

Curricula in this three-year programme covers various aspects such as Food Chemistry & Nutrition, Dairy Technology, Fruit & Vegetable Technology, Meat, Fish & Poultry Technology, Food Fermentation Technology, Bakery & Confectionery Technology Cereals & Pulses Technology, Food packaging Technology, Unit Operations and Principles of Food Processing & Preservation, Food storage and Transportation, Current food analysis techniques, as core courses. Applications of enzymes in food processing, Food product development, Nutraceuticals and functional foods, Nutrigenomics etc will be offered as electives and skills in these areas will address the needs of consumers and the food industry. Emphasis on familiarizing students with industry practices and procedures will prepare them to choose careers in food technology. This will help students to opt for higher studies and encouraging development of an entrepreneurial mindset.

## Diploma in Electronics and Computer Engineering (JUA)

A Diploma in Electronics and Computer Engineering program blends fundamental principles of electronics with computer science concepts, preparing students for a range of career opportunities in these two fields. Students in this program typically study subjects such as digital electronics, circuit design, computer programming, embedded systems, telecommunications, IoT, software development, web & mobile application development, cyber security and system administration, etc.

Graduates of this diploma program can pursue careers as electronics technicians, computer hardware engineers, network administrators, embedded systems developers or IT support specialists. They may work in industries such as semiconductor, telecommunications, consumer electronics, automotive electronics, aerospace or information technology. With the increasing demand for skilled professionals in the electronics and computer engineering sectors, graduates of this program are well-positioned to contribute to technological innovation and meet the evolving needs of the digital age.

Diploma graduates also have the chance to further their higher education, particularly through B.Tech programs, where they may qualify for direct entry into the second (2nd) year of B.Tech. Program in CSE, ECE, IT and other related areas. This opportunity allows them to advance their academic journey and capitalize on their prior learning experiences.

# 5 Years Integrated M.Tech Programs (JIIT)

## Computer Science & Engineering

The five year integrated M.Tech. program is designed for those students who are deeply fascinated by Computer Science & Engineering and are keen on specializing in this discipline. Through six months full time dissertation, students are groomed to start an R&D oriented career in IT industry or pursue their doctoral studies in Computer Science & Engineering. The curriculum offers foundation as well as advanced courses on a wide spectrum of computing areas-Programming, Algorithms, Databases, Computer Organization and Architecture, Operating Systems, Computer Networks, Web and Mobile Computing, Embedded Systems, Distributed Systems, Artificial Intelligence, Machine Learning, Software Engineering, Information and Networks Security, Multimedia Computing, Performance Modelling etc. The job opportunities and placement statistics of Integrated CSE program is equivalent to B.Tech. CSE & IT students. Moreover since these students have been exposed to the research based PG Curriculum, Integrated students are doing much better in the industry as well as in research.

## Biotechnology

The department offers a five years Integrated M.Tech program with additional specialized core and elective courses with Biomolecules and Cell Communication, Nanobiotechnology, Phyto-therapeutics and Pharmacology, Regulatory Affairs, Drug Delivery, Genomics & Society Biostatistics, Product Development in Biotechnology, Experimental models in Research and Molecular Diagnostics .

The curriculum is designed to generate trained manpower in biotechnology, equipping our students with knowledge and hands-on skills in constantly advancing biotechnological areas. Firm with our belief in comprehensive growth of our students, we work to enhance their proficiencies by our strategically designed laboratory experiments and mandatory components of Project Based Learning, Seminar & Term Papers along with year-long research project(s) and industrial trainings, providing the students with necessary scientific and professional exposure to firm their grounds before stepping in to their respective career directions, be It fields of R&D, Academics, Consulting, etc.

## Electronics and Communication Engineering

The integrated M.Tech program in Electronics and Communication Engineering is a specially designed program which includes courses of both B.Tech and M.Tech degrees in the discipline of Electronics and Communication Engineering and emphasizes on an in-depth understanding of several advanced and state-of-the-art courses in the area of Signal & Speech Processing and Coding, Wireless Communication, VLSI, System on Chip, Satellite Communication, Machine Learning, Microwave Engineering etc.

The integrated program provides the students with the opportunity to acquire comprehensive understanding in an area of their selected field through electives and individual projects. The laboratory courses offer practical exposure to them. The program prepares the students for research and development activities, industrial work as well as for higher studies.



# P G Programs 2024-25

Program	JIIT – Noida, U.P.	JUIT – Waknaghat, H.P	JUET – Guna, M.P.	J U - ANOOPSHAHR
<b>M.Tech.</b>	<ul style="list-style-type: none"> <li>• Biotechnology</li> <li>• Computer Science &amp; Engineering</li> <li>• VLSI Design</li> </ul>	<ul style="list-style-type: none"> <li>• Biotechnology</li> <li>• Computer Science &amp; Engineering (CSE)               <ul style="list-style-type: none"> <li>✓ Information Security</li> <li>✓ Data Science</li> </ul> </li> <li>• Electronics and Communication Engineering (ECE)</li> <li>• ECE with specialization in               <ul style="list-style-type: none"> <li>✓ Internet of Things(IoT)</li> </ul> </li> <li>• Civil Engineering with specialization in               <ul style="list-style-type: none"> <li>✓ Construction Management</li> <li>✓ Environment Engineering</li> <li>✓ Structural Engineering</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Chemical Engineering (specialization also available in Energy and Environmental Engineering)</li> <li>• Computer Science &amp; Engineering (specialization also available in AI &amp; DS/ AI &amp; ML)</li> <li>• Electronics &amp; Communication Engineering (specialization also available in Microelectronics and VLSI design/ IOT)</li> <li>• Mechanical Engineering (specialization available in Manufacturing Technology/ Machine design/ Renewable Energy)</li> <li>• Civil Engineering (specialization available in Structural Engineering/ Environmental Engineering/ Construction Management)</li> </ul>	X
<b>Integrated M.Tech</b>	<ul style="list-style-type: none"> <li>• Computer Science &amp; Engineering</li> <li>• Electronics and Communication Engineering</li> <li>• Biotechnology</li> </ul>	X	X	X
<b>M.C.A</b>	M.C.A	X	X	M.C.A
<b>M.Sc.</b>	<ul style="list-style-type: none"> <li>• Mathematics</li> <li>• Physics</li> <li>• Microbiology</li> <li>• Environmental Biotechnology</li> <li>• Economics</li> </ul>	<ul style="list-style-type: none"> <li>• Microbiology</li> <li>• Biotechnology</li> <li>• Physics</li> </ul>	<ul style="list-style-type: none"> <li>• Chemistry</li> <li>• Mathematics</li> <li>• Physics</li> </ul>	X
<b>M.B.A</b>	<ul style="list-style-type: none"> <li>• Marketing</li> <li>• Finance</li> <li>• H.R</li> <li>• Operations</li> <li>• IT &amp; Business Analytics</li> <li>• Hospital and Healthcare Management</li> <li>• Education Management</li> </ul>	X	X	<b>M.B.A</b>

# About P G Programs

## M.Tech (2 Years)

The objective of the program is to impart advanced level knowledge in specialized field making the students fit for academia as well as industry and assume responsibilities requiring further research, design and development aptitude. Through compulsory core and open elective subjects, the students acquire a state-of-the-art advanced knowledge in a chosen field of specialization. These selective courses give the opportunity to further specialize in the field depending on his/her interest and the future career plan. For project work and dissertation students are required to take-up problems on a particular topic in the field culminating in submission of a dissertation/report.

## M.Tech in Computer Science and Engineering (JIIT, JUIT, JUET)

M.Tech. (CSE) programme has been designed to equip the students with ability and skills to analyse, design and develop computer system with their applications. The programme provides advanced level education and research exposure in various areas of computing like Data Structures and Algorithms for Big Data, Machine Learning and Data Mining, Internet of Things, Cloud Technology, Cloud and Web Services, Data Science etc. After completing an M. Tech. in Computer Science, students can pursue careers in a wide range of industries, including software development, data analysis, artificial intelligence, machine learning, and computer networking. They can also pursue doctoral studies in computer science or related fields. Second year of the programme is devoted to dissertation /industrial internship or IT entrepreneurship project, & thus students have option to start their internship at Industry also. M.Tech. (CSE) is framed in such a way that student can design their own degree. In the beginning of the second semester, student has freedom to select the area of specialization like AI & ML, Data Science, IOT, Cyber Security etc for the remaining semesters.

## M.Tech in VLSI Design (JIIT)

The M.Tech. in VLSI Design at JIIT Noida offers a rigorous curriculum combining theoretical knowledge with practical experience. Our program emphasizes hands-on learning through specialized laboratories equipped with industry-standard software and hardware. The Fabrication Laboratory, a cornerstone of our program, provides

students with invaluable hands-on experience in semiconductor fabrication processes. Staffed by experienced faculty and technical experts, the lab offers state-of-the-art equipment for designing, fabricating, and characterizing semiconductor devices and integrated circuits. With a focus on both hardware and software aspects, students gain a comprehensive understanding of VLSI design, preparing them for careers in electronics manufacturing, chip fabrication, and communication industries. The program also offers opportunities for specialization, allowing students to tailor their learning experience to their career goals. Overall, the M.Tech. in VLSI Design program at JIIT Noida equips students with the knowledge, skills, and practical experience needed to succeed in the dynamic field of semiconductor technology.

## M.Tech in Electronics & Communication Engineering (JUIT/JUET)

Master of Technology in Electronics and Communication Engineering covers wide range of advanced communication subjects such as Wireless and mobile communication, VLSI Circuits and System Design, Digital Signal Processing, Network Security, Information Theory and Coding, Soft Computing, Signal and Image Processing, Antenna Theory and Design, Digital and Analog IC Design, Advanced Satellite and Fiber Communication System, etc.

## M. Tech. in Biotechnology (JIIT & JUIT)

M.Tech Biotechnology is a 76 credits full-time 2 years program of four semesters run by the Department of Biotechnology and Bioinformatics. The M.Tech program in Biotechnology is designed to generate trained manpower in Biotechnology, equipping our students with the knowledge and hands-on skills, making them proficient in constantly advancing biotechnological areas. Students get hands-on laboratory skills by providing research work in the second year that includes thrust areas of Industrial and Medical Biotechnology.

## M.Tech in Civil Engineering (Construction Management) (JUIT)

The program provides preparation for effective leadership in the field which includes light (residential and small office buildings) and heavy (large office buildings and facilities, infrastructure) projects. It aims at educating the students with regulatory, insurance, management, safety, planning tools, estimation and environmental aspects of management necessary for overall planning and control of construction projects.

The course helps in gaining innovative problem-solving skills to determine costs and apply time- value-of-money concepts to effectively evaluate alternatives. With a curriculum developed in collaboration with the University of Florida (USA), the programme assures relevant and global standards of education.

### **M.Tech in CSE (Information Security) (JUIT)**

Information Security aims to train students to become information security professionals for the high-end jobs in the security industry. The objective of this programme is to create security professionals who will be handling the real-life problems and challenges the industry is facing today in connection to cyber security. The unique design of the programme focuses on providing a high degree of industry exposure, academic and functional experts from the industry in this domain. This programme offers a brilliant career pathway to those who are passionate about knowing more about security challenges and solutions as well as practicing security analytics, cyber security, and related tools and technologies. Job Openings for cybersecurity are also increasing by 200% each year in India. M.Tech in CSE with specialization in Information Security (JUIT) Information security is a fast growing area and has been recognized as a national priority. This program aims to enhance the knowledge and core competencies in contemporary computer science and also provide a deep understanding of security related aspects. The curriculum includes a comprehensive set of core and elective courses to achieve both these purposes

### **M.Tech in CSE (Data Science) (JUIT)**

Data Science is one of the most happening fields in business today, creating a higher number of career opportunities. Data Scientists are in high demand around the globe almost in all existing verticals i.e. Education, Manufacturing, Healthcare, Agriculture, etc. The course has inclusive realms, namely Statistics, Machine Learning/ Programming/ Data Skills, Business Domain knowledge; covering all the mains of the Data Science that helps the students to achieve a solid grip over it. One of the major objectives of this course is to provide an in- depth understanding of data structure and data manipulation, and understanding of various supervised and unsupervised learning models such as linear regression, logistic regression, clustering, dimensionality reduction, K-NN, and pipe line.

### **M.Tech in ECE (Internet of Things) (JUIT)**

M.Tech in ECE with specialization in the Internet of Things (IoT) is an interdisciplinary program. This course is mainly related to the network of physical objects –“things”-

that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the Internet. The aim and objectives of this course is to: Generate IoT concepts and design IoT solutions within your area of expertise, Map out the process for an IoT solution, and identify the sensors and other devices required, evaluate different infrastructure components and network systems, and design the basic network for your IoT ideas, apply software solutions for different systems and Big Data to your concept designs, and appreciate how data is managed in the network, identify and analyze IoT security and privacy risks, and concept design secure hardware and software. The main contents of the course will be: Introduction to the Internet of Things (IoT), IoT Sensors and Devices, Embedded Deep learning at IoT device layer, IoT Networks and Protocols, IoT Programming and Big Data, Cyber security and Privacy in the IoT, Programming & Interface on Raspberry Pi and Jetson nano development boards, and design of IoT prototype project addressing diversified applications.

### **M.Tech in Civil Engineering (Structural Engineering) (JUIT&JUET)**

This course is designed for students who wish to pursue their career as Structural Engineer. Study is focused on scientific principles to design and build various structures such as multi- storey buildings, bridges, tunnels, dams, etc. The course introduces numerically demanding research and design exercises relating to a wide-range of structures using simulation, modelling and computational software programs such as STAAD pro, Abaqus, Ansys, SAP, Revit etc. The program lays equal emphasis on laboratory work, industrial visits and research based dissertation.

### **M.Tech in Civil Engineering (Environmental Engineering) (JUIT & JUET)**

M.Tech in Environmental Engineering is a two-year post-graduate program aimed to give insights on the topics of advanced process of environmental policy planning and how to ensure efficient and timely implementation of sustainable environment projects. Students are imparted advanced learning in Process design in Environment Engineering, Industrial waste water treatment, Environmental law and Policy, Risk Management, Optimisation Techniques, Environmental Policy Management and treatment facilities. The students are exposed to practical learning through Industry-academia interaction as well as research work, by working on real-world projects in the field of environmental engineering.

## **M.Tech in Civil Engineering (Construction Management) (JUET)**

Construction Management is a specialization which is required at construction sites. Civil Engineering post-graduate who aspires to make their career in construction industry should opt for this specialization. As the construction industry is modernizing day by day, new technologies and automation are need of the hour.

## **M.Tech in Chemical Engineering (JUET)**

The program provides advanced courses in areas such as Process Modeling and Optimization, Advanced Separation Processes, Advanced Process Control, Advanced Transport Phenomenon and Fluidization Engineering. The course offers a wide range of electives. The students have to take a research activity as a component as major part of the program. The aim of the program is to train students to assume independent responsibilities laying emphasis on the country's current and future requirements in industry, R&D organizations, design firms and academic institutions.

## **M.Tech in Mechanical Engineering (Manufacturing Technology) (JUET)**

M. Tech in Mechanical Engineering (with specialization in Manufacturing Technology) has been developed keeping the industrial requirement in view. Applications of Manufacturing Technology are to manage manufacturing resources efficiently and effectively and thus improve the productivity of an industrial organization. The curricula of this program is open to Mechanical and Production Engineering graduates only.

## **Master of Computer Application – MCA (JIIT)**

Master of Computer Application (MCA) -The department of Computer Applications (CA) offers two-year MCA program in addition to undergraduate and Ph.D. program in Computer Applications. MCA Curriculum is well designed to align with industry standards and best practices consisting of core courses, elective courses and dissertation/ project.

MCA program will help graduates develop strong theoretical and practical knowledge in computing required to proficiently build software solutions for societal and industrial needs. It will help them to pursue career as entrepreneurs and innovators; software developers or go for higher education and research. MCA program will not only hone their technical skills but also give them skills related to oral and written communication, collaborative working in teams, exhibiting ethical standards, leadership and project management capabilities. This will open up a plethora of career opportunities as software architect, software developer, system analysis, database

administrator, Data Scientist, Project Manager and many more. They can also pursue research opportunities by enrolling in Ph.D. programs, collaborating with research institutions, or working in research and development organizations or can even join the respectable profiles in academia/ teaching or choose to start their own IT-related business or venture into entrepreneurship.

## **Master of Computer Application – MCA(JUA)**

The Master of Computer Applications (MCA) program is a gateway to a multitude of career opportunities in the ever-evolving field of computer science and technology. Offering a blend of theoretical knowledge and practical skills, the MCA curriculum covers areas such as software development, programming languages, database management, networking and information systems, Artificial Intelligence, Machine Learning, Cyber Security and Cloud Computing etc. Graduates of MCA programs are well-equipped to pursue diverse career paths including software development, systems analysis, database administration, web development, cyber security, Data Scientist, Business Analytics and IT consulting.

With the increasing demand for skilled professionals in the tech industry, MCA graduates find themselves in high demand across various sectors from technology firms and software companies to financial institutions, government agencies and beyond. The MCA program not only provides graduates with specialized expertise but also fosters critical thinking, problem-solving abilities and adaptability, essential qualities for success in today's rapidly evolving digital landscape.





# M.Sc. Programs

M.Sc. (2 years) programs in Sciences and Mathematics are designed to cater to the need of academics, research and industry. M.Sc. courses explore advanced theory and analysis together with their applications in a range of practical contexts. These courses offer an exciting opportunity to those interested in higher studies in Sciences and Mathematics.

## M.Sc. in Physics (JIIT, JUIT & JUET)

A two year M.Sc program in Physics is offered by the department of Physics and Materials Science and Engineering (PMSE). The course curriculum of this program is designed with an objective to provide understanding and skills in Physics suitable for a professional career in academics, R&D and doctoral studies in sub-domains of experimental and theoretical Physics/ Applied Physics.

The curriculum of this four-semester program follows choice based credit system (CBCS) with the option of advanced study and training in two specializations: A. Condense Matter Physics and B. Applied Optics. The first three semesters cover the fundamentals of the subject. During the fourth semester, students undertake project/dissertation work. The department has well equipped curricular and research laboratories with modern and state of the art equipment. In addition, regularly organized seminars, expert talks, and opportunity to interact with a large number of Ph.D students and Post-Doctoral fellows bestow a dynamic ambience and an excellent learning environment.

## M.Sc. in Mathematics (JIIT & JUET)

The M.Sc. program in Mathematics is carefully designed to convey essential knowledge in Mathematics and to provide substantial opportunities for pursuing excellence in all major areas of pure and applied mathematics. The objective of this program is to develop mathematical aptitude in students, nurture their interests towards mathematics and motivate them for research in mathematical sciences. It consists of a broad-based curriculum which reflects an extensive understanding of different aspects of mathematics and its applications. The M.Sc. program comprises of four semesters in which first two semesters are enriched with core courses in mathematics whereas the final two semesters offer a wide range of elective courses in both pure and applied mathematics. Students will get exposure of programming languages through Lab courses so that latest trend/demand could be offered to them. The

final semester includes dissertation work which enhances their logical ability, report writing and computational skills. The wide range of application-oriented course is so designed that after the completion of the course, the students would be well equipped to go to industries or to join academics and research.

## M.Sc. in Microbiology (JIIT & JUIT)

An increasing global awareness on environmental issues towards deteriorating environmental quality has encouraged research in the domain of environmental biotechnology. Environmental biotechnology specifically focuses on the application of biotechnology-based processes for providing sustainable solutions to combat environmental damage. Globally emerging environmental issues require immediate concern to address the issues arising from pollution, climate change, exploitation of natural resources, ecosystems, biodiversity and food security. As an example, waste production is expected to go up to 2.2 billion tones by 2025 and it is estimated that 3 million people are hospitalized due to chemical poisoning every year (FAO data), arising from contaminated soil and water.

The sustainable and eco-friendly nature of Biotechnology-based solutions is a promising alternative. for finding cost-effective measures. Microorganisms and plants are being used for bioremediation of environmental pollutants and commercially available technologies have proven to be safe and effective. Keeping environmental laws and regulations in mind, biotechnology- based strategies for the environment are the promising approach as compared to available conventional technologies.

## M.Sc. in Environmental Biotechnology (JIIT)

With an increasing awareness on environmental issues amongst general public, who's genuine concern towards deteriorating environmental quality is pushing research in the domain of environmental biotechnology. Biotechnology involves the use of living systems for developing products for the benefit of mankind. It is a broad area encompassing applications in various fields such as medicine, food, and environment. Environmental biotechnology specifically focuses on the application of biotechnology-based processes for providing solutions to minimize, and ultimately combat environmental damage. Emerging concerns regarding global environmental changes require an urgent necessity to address the issues arising from pollution, change of climate, damage to natural ecosystems and biodiversity and food security. As an example waste production is expected to go up to 2.2 billion tones by 2025 and it is estimated that 3 million people are hospitalized due to chemical poisoning every year (FAO data), arising from contaminated soil and water.

The sustainable and eco-friendly nature of Biotechnology-based solutions is a promising alternative for finding cost-effective measures. Micro organisms and plants are being used for bioremediation of environmental pollutants and commercially available technologies have proven to be safe and effective. Phyto-remediation is also emerging as a promising approach. In contrast to available conventional technologies, biotechnology- based strategies for the environment can be very successfully implemented, keeping environmental laws and regulations in mind.

The rigorous two-year M.Sc. program in Environmental Biotechnology prepares our students from basics-to-application of existing and emerging biotechnological tools for the process development and reducing or mitigating the impact of environmental pollutants. The program makes available, the avenues for a career in industry, academia, and entrepreneurship, both in public and private sectors.

### **M.Sc in Economics (JIIT)**

This programme provides the students the necessary analytical and quantitative skills and knowledge for demanding careers in the field of economics. The programme is interdisciplinary in nature. It gives students strong foundations in contemporary economic theories, methods of econometric analysis, mathematics and computer programming that will help them to analyze and forecast various processes associated with economics.

This is an advanced course in Economics and its applications with special emphasis on quantitative methods. On completion of the programme, the students would be able to pursue an academic career in Economics or take up responsible positions in various private and public sector organizations. The programme provides an edge for students who are aiming to make a career in Analytics and Credit Scoring Sector most notably in Banking, Insurance, Scientific Research and Auditing & Consulting firms.

### **M.Sc. in Biotechnology (JUIT)**

M.Sc. Biotechnology is a full-time credit-based 2-years program of four semesters run by the Department of Biotechnology and Bioinformatics. The curriculum has been designed to impart basic and advance knowledge of concepts and applications of Biotechnology in various domains e.g. Industry and Bio-processing, Medical, Healthcare, Agriculture and Environment. Students are provided rigorous hands-on skills in the practical courses to develop their research acumen during their research projects. This enables them to design; conduct experiments to analyze and interpret data for investigating problems in Biotechnology and Allied fields. Students are trained to acquire competitive edge to get Biotechnology oriented jobs in industry to

pursue entrepreneurship ventures. Since 2020 the DBT, Govt of India has sanctioned 10 seats supported by DBT (selected through GAT-B) out of the total 30 seats in the program.

### **M.Sc. in Chemistry (JUET)**

A two year M.Sc. program in chemistry is offered by the department of chemistry. The course curriculum of this program is designed with an objective to provide understanding and skills in chemistry suitable for a professional career in academics, R&D and doctoral studies in sub-domains of experimental and theoretical chemistry/ Applied chemistry.

The curriculum of this four-semester program follows choice based credit system (CBCS). The department has well equipped curricular and research laboratories with modern and state of the art equipment. The curriculum contains project work which provides opportunity for experiential learning. In addition, seminars, and expert talks are also organized regularly where students have opportunity to participate.



# Master of Business Administration (MBA)

## MBA at Jaypee Business School (JBS)

The MBA Curriculum at JBS is designed to pave the way for a successful career in the business/corporate world and sow the seeds of entrepreneurship. The MBA curriculum at JBS offers both rigor and flexibility. The core curriculum is cross functional wherein fundamental business courses on Marketing, Business Analytics, Economics, Finance and Accounting, Statistics, Human Resource Management, Business Communications, Information Technology and Operations are offered.

In the second year, the students can choose from a wide range of electives to suit their interest and aptitude. The students opt for one area of major specialization and one area of minor specialization. The curriculum is constantly evolving with inputs from faculty members, industry professionals, alumni, students and academic professionals from reputed organizations.

The MBA program at JBS equips students to think logically and work in diverse teams and enables them to integrate knowledge across functional areas. The program aims to build socially sensitive managers through its four week mandatory social internship in an NGO.

The eight week corporate internship at the end of the first year enables the students to gain first hand experience of working in the real world.

To ensure that our management graduates are not only adept at using technology for making decisions but are also able to understand how to advance their knowledge across multiple technologies, JBS has introduced Technology in Management Courses in the core areas. Courses on Internet of Things, Artificial Intelligence in Business, Integration of Information Systems in Business are part of the core curriculum. In addition, through courses such as Data Visualisation, Analytical and Technical Skills (Lab) and Data Analytics for Business Decisions, JBS ensures that students learn to design and implement database management systems.

## MBA at Jaypee University Anoopshahr (JUA)

An MBA program offers a comprehensive education in various facets of business management, including finance, marketing, operations, HR and strategy. Completing an MBA can significantly enhance career opportunities by equipping graduates with valuable skills and knowledge sought after by employers worldwide. Graduates often pursue diverse career paths such as management consulting, finance, marketing, entrepreneurship and corporate leadership roles. The degree also provides a strong foundation for professionals looking to advance within their current field or transition into new industries.

With its emphasis on leadership, critical thinking and strategic decision-making, an MBA can open doors to rewarding career opportunities and pave the way for long-term success in the business world.



## Doctoral Programs (Ph.D)

The Ph.D. programs are available in various specializations such as Bioinformatics, Biotechnology, Civil Engineering, Chemical Engineering, Mechanical Engineering, Computer Science and Engineering, Information Technology, Electronics and Communication Engineering, Management, Humanities & Social Sciences, Mathematics, Physics, Chemistry, Materials Science and Engineering at various campuses. 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. The research work is expected to result in new findings, contributing to the knowledge

In the chosen field. The doctoral research program gives an opportunity to students to demonstrate their analytical, innovative and independent thinking, leading to creativity and application of knowledge. 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 awarding of the Ph.D. degree. They are also required to take-up some advanced level course work.

Financial Support is provided to eligible full time Ph.D students in the form of Research Fellowship/Teaching Assistantship.

Program	JIIT-Noida	JUIT- Wagnaghat	JUET-Guna
<b>Electronics &amp; Communication Engineering</b>	Speech Processing, Signal Processing, Machine Learning, Image and Video Processing, Filters, Optical and Wireless Communications, Wireless Sensor Networks, CMOS Design, Micro-electronics, Internet of Things, VLSI Design, Embedded Systems, RF and Microwaves.	Internet of Things (IoT), Aerial Robotics, UAV,UGV, VLSI Design Technology, Computer Vision & Robo Vision, VLSI & Embedded System Design, 5G Communication, Software Defined Radio, Networked Control Systems, Applications of Internet of Things, Cognitive Radio, Cyber-Physical Systems, Smart Antenna and 5G Antenna Design, Applications AI Based Techniques, Genomic Signal Processing, Fusion of Medical Images.	Digital Signal Processing, Image Processing, Stochastic Computing, VLSI, Resource Constrained Design, Wireless Communication, Digital Commutation, Soft Computing, RF and Microwave, and Bio-Metrics.
<b>Computer Science &amp; Engineering</b>	Artificial Intelligence and Machine Learning, Information Retrieval, Data and Web Mining, Distributed Systems & Cloud computing, Computer Networks, Wireless Networks, Web & Mobile Technologies, Security, Software Engineering ( Agile, DevOps etc), Data Analytics, Big Data, Social Network Analytics, Multimedia Technology and Applications, IOT & IOT Security.	Mobile Computing, Cloud Computing, Computer Networks, Wireless Sensor Networks, Forensics, Social Networks, Software Engineering, Image Processing, Computer Vision, Data Mining & Warehousing, Information Retrieval, Performance of Algorithms, Graph Neural Networks, Pattern Recognition and Machine Learning, Natural Language Processing, Internet of Things (IoT), Cyber Physical Systems -Industry 5.0, Neuromorphic system-on-chip, Information Security, Vehicular Networking.	Grid Computing, Cloud Computing, Image Processing, Pattern Recognition, Image Security, Network Communication, Information System Security, Software Engineering, Data Mining & Warehousing, Big Data and Data Analytics. Wireless Sensor Networks, Internet of Things.
<b>Biotechnology &amp; Bioinformatics</b>	Medical Biotechnology, Bioinformatics, Genomics & Proteomics, Plant & Microbial Biotechnology, Environmental Biotechnology, Novel Drug Delivery Systems, Nano- Biotechnology, Infectious Diseases, Life Style Diseases and Food Technology.	Genomics and Proteomics, Microbial Biotechnology, Micropropagation Technologies, Industrial Enzymes, Biofuels and Bioremediation, Structural Bioinformatics, Computational Systems Biology, Computational Drug Discovery, Medicinal Chemistry and Microbial Peptides, Stem Cells, Infectious Diseases, Cancer Biomarkers, Biosensors and Nanobiotechnology.	

Program	JIIT-Noida	JUIT- Wagnaghat	JUET-Guna
Physics & Materials Science	Advanced Materials, Nanoscience and Nanomaterials, Quantum Optics & Computing, Atomic & Molecular Physics, Energy Materials and Devices, Photonics and Plasma Physics, Semiconductors, Nuclear and Particle Physics.	Microstrip Antenna & Devices, Magnetic Thin Films, Gas Sensors, TiO <sub>2</sub> and ZnO <sub>2</sub> Thin Films, Chalcogenide Semiconducting Thin Films, II-VI & IV-VI Quantum Dots	Spectroscopic Studies of Polymers and Finite Crystals, Nanomaterials, Energy Storage Devices, Nonlinear Dynamics and Quantum Optics.
Mathematics	Fractals & Chaos, Mathematical Analysis, Numerical Analysis, Computational Continuum Mechanics, Applications of Differential Equation, Fuzzy Set Theory, Information Theory, Soft Computing, Image Processing, Optimization Techniques.	Lie Symmetries, Group Theoretic Techniques for Differential Equations, Contact Mechanics, Fuzzy Information Theory and Decision Making, Differential Geometry, Algebraic Coding Theory, Soft Computing, Applied Optimization, Numerical Optimization Techniques.	Fluid Mechanics, Information Theory and its Applications, Fuzzy Sets and logic & Fuzzy Information Measures.
Humanities and Social Science	Political Sociology, Anthropology; Psychology, Public Finance, Development & Health Economics; Financial Accounting and Evaluation, Corporate Finance, Banking; Indian literature, Organizational Behaviour, HR Information System, Emotional Intelligence, Social Media & EMarketing.	Online Marketing, Service Marketing, Consumer Behavior; Corporate Finance, Public Finance, Economic Development, International Trade and Globalization; American, British and Canadian Drama/ Theatre, Gender Studies; Good Governance and Human rights; Emotional intelligence and Employee Relations.	Human Resource Management & Behavioral Studies, Economics and Human Behavior at work place, E-Commerce, Marketing Management, Communication at workplace.
Civil Engineering		Ground Improvement and Slope Stability, Municipal Solid Waste Management and Air Quality Monitoring, Fluvial Hydraulics, Construction Materials and Structural Dynamics, Sustainable Highway Construction Materials and Maintenance, Construction Management.	Concrete Technology, Geotechnical Engineering, Hydraulics & Water Resources Engineering, Transportation Engineering, Environmental Engineering. Advanced Building Material, Soil & Rock Mechanics and Structural Engineering.
Chemical Engineering			Recovery of Metals from Industrial Wastes, Foam fractionation & Control of Volatile Organic Compounds.
Mechanical Engineering			Dynamics of Machine Tools, Machine Design and Vibration Analysis, Condition Monitoring and Fault Diagnosis of Machine Tool Structures, Analysis of Machine Tools, CAD/ CAM, Advanced Manufacturing Processes, Computational Fluid dynamics, Heat and Mass Transfer, Refrigeration and Air Conditioning, Solar thermal Applications, Renewable Energy and Solar Water Desalination.
Chemistry			Novel Surfactants, Oleo Chemicals, Polymer Chemistry, Environmental Science, Natural Products
Management	Marketing, Finance, Operations and Supply Chain Management, Economics and International Business, Human Resource Management and Organizational Behavior, Hospital & Healthcare Management and Education Management.		

# Libraries

## Learning Resource Centre (JIIT)

The Learning Resource Centre (LRC) is an excellent repository of learning resources. It can accommodate about 700+ users at a time. It has more than 80 computer nodes with high-speed Internet & Intranet connectivity. LRC is well-stocked with Indian and International books and journals covering all areas of Engineering & Technology, Science and Business Management and to meet the needs of students, faculty and research scholars. LRC has approximately 89,478 books with more than 29,189 titles and approximately 3,55,000 E-Resources (National and International). LRC has to subscribe more than 15000 e-Books. JIIT has two libraries for the students and faculty. Central Library: Located at Sector 62 Campus, having 25,020 title and 69,882 volumes. Departmental Library at Sector 128: having 4,169 titles and 19,596 volumes.

The salient features of the libraries are: Fully integrated with the latest barcode technology and international standard open source Library Management Software "KOHA". Accessibility to bibliographic details of LRC resources through OPAC anywhere. Latest collection of textbooks as well as reference books and national and international peer-reviewed journals, magazines and electronic resources.

LRC has membership of DELNET, National Digital Library and INFLIBNET. LRC has also membership of INFED (Remote Access Tool). INFED is developed by UGC-INFLIBNET centre which is implemented in the JIIT Noida-LRC for the benefits of the academic and research community of the institute. The major objective of this facility is to provide greater flexibility to authorized users of the university by enabling them to access the resources from their campuses, home or even while travelling. LRC has dynamic website <https://www.jiit.ac.in/lrcjiit/>. LRC has subscribed Anti-Plagiarism web tools to enhance the quality of research.

• BookTitles	29,189
• Book Volumes:	89,478
• Print Journals:	74
• e-Journal:	8400+
• e-books	15000+
• Other online resources:	3,50,000+
• National Digital Library Contents:	5,97,000+



## Learning Resource Centre (JUIT)

The Learning Resource Centre (LRC) at JUIT Waknaghat is the backbone of academic and research activities that supports teaching, learning and research aspects of the University. The LRC is established as three-storied entity embedded in the academic block of the University and entirely devoted to the scholastic needs of students and faculty. It possesses a wide range of information resources in the areas of Computer Science & Engg., IT, Civil Engg., Biotechnology, Bioinformatics, Mathematics, Physics & Materials Science, Electronics & Communication Engineering along with collections from Humanities and Social Sciences. A good collection of quality and latest books on competitive examinations and general readings also exist. LRC adopts an open shelf system that offers the freedom to students to visit, browse, read and explore any document available on the shelves and in digital mode.

The subscription of various scholarly databases such as ACM, IEEE, Springer, Nature Journal, ASCE, Pro Quest with access to NPTEL and NDL resources is one of the key features of the LRC. Apart from the e-databases, LRC also subscribes to 70 print journals of repute. Subscription to various local, regional and national newspapers in Hindi and English is an important service of the LRC. The LRC activities are fully

computerized with the help of Library Management Software, known as 'LIBERTY' and 'KOHA' has also been taking place. The OPAC feature of the software would provide seamless access to bibliographic details of library holdings to the users from anywhere over the Internet / Intranet.

The Library has been an active member of the National Digital Library (NDL) which is a project under the Ministry of Human Resource Development, India. It actively contributes to Shodhganga and Shodhgangotri repositories of UGC. Being an active member of the Developing Library Network (DELNET), users can avail inter-library loan facility of the library. LRC has been developed as a core student centric library with the help of its specialized services. It has an Institutional repository (Digital Library) which is hosting project reports, Thesis, Newsletters, Annual Report & previous year questions papers etc. All library services focus on users to keep them abreast of latest happenings in their respective areas of learning along with the procuring quality information resources, organizing book exhibitions and conducting user awareness programmes on a regular basis

• Book Titles:	22,094
• Book Volumes:	42,663
• Print Periodicals:	70
• E-Journals:	6,415
• Other online resources: Conference Proceedings News Letters / Reports etc	3,706
• E-Books and NDL Contents:	401E-books + NDL Access

## Learning Resource Centre (JUET)

LRC at JUET Guna is an excellent repository of learning resources. It is situated in AB-III, which can accommodate about 250 users at a time. It has more than 30 computer nodes with high speed Internet & Intra net connectivity. Systems of LRC are fully integrated with the latest barcode technology and International standard library management software Liberty. Users can access bibliographic details of the LRC through OPAC from any node of the campus, thus providing 24X7 access. The open access system has been adopted at all service points where users may browse and select material of their choice. The LRC consists of latest collection of textbooks, reference books, national and international peer reviewed journals, magazines and electronic resources on subject areas covered by the academic curricula of the University. LRC has made provisions to subscribe full text engineering journals in printed form. It is



also member of Developing Library Network (DELNET) and provides inter-library loan services to its users. LRC has implemented an anti-theft electromagnetic system at its main gate. Subscription of Anti-Plagiarism Software "DRILLBIT" is available under Shodh Shuddhi program of Ministry of HRD, Govt. of India. Subscriptions of 5000+ e-magazines and periodicals are available through Magzter. LRC collections are being updated periodically.

• Book Titles:	9090
• Book Volumes:	37372
• Printed Journals:	53
• e-Journals:	19783
• Other online resources:	499390
• National Digital Library Contents:	100218178

## Learning Resource Centre (JUA)

The Learning Resource Centre at Jaypee University, Anoopshahr is an excellent repository of learning resources. At present LRC has a good collection of Books, National and International printed Journals and magazines. Apart from printed resources LRC is also having electronic material, CD-ROMs and full text e-journals. It's a hub where users can learn and explore the world of knowledge. It provides a

platform to pursue a wide array of intellectual, social and cultural endeavors. LRC offers expertise, rich collection and technology, customize services for readers throughout and always helps to navigate through the ocean of information. The LRC at Jaypee University, Anoopshahr provides a welcoming, comfortable, technology enriched environment that supports the courses taught at the campus. It is enriched in fields like Computer Science, Information Technology, Electronics and Communication, Civil Engineering, Mechanical Engineering, Mathematics, Physics and Materials Sciences, Arts, Humanities, Management, Commerce, Life Sciences and other related applied fields. LRC adopts an open shelf system which offers freedom to students to visit, browse, read and explore any document available on the shelves. The LRC is fully automated using KOHA – Integrated Library Management System. Users can access bibliographic details of the LRC resources through OPAC anywhere, thus providing 24 hours access a day. Thus, LRC augments the environment where one can work, grow and succeed. LRC has a dynamic website <http://lrc.jaypee.ac.in/>.

• Book Titles	1622
• Book Volumes	10715
• Print Journals	44
• Print Magazines	16



## Centres for Excellence

### JIIT, Noida

#### Centre for Biotechnology Solutions for Soil & Water Remediation

Rapid industrialization, increased productivity demands and environmentally inappropriate human activities continuously challenge natural resources including Soil, Air, & Water. Multiple pollutants generated as refuse/effluent present serious environmental threats. Biotechnology offers economical and safe solutions to restore Soil, & Water quality through application of a choice of plants & microbes. At Centre, we aim to address issues of soil & water pollution broadly subdivided into three subdivisions namely: MAR - Microbe Assisted Remediation, PAR - Plant Assisted Remediation, EAR – Enzyme Assisted Remediation. In MAR, Bacteria & Fungi with proven bioremediation capabilities would be employed for clean-up processes in soil / water environments. Under PAR, chosen phytoremediator plants will be applied to decontaminate soil/water of organic and inorganic pollutants. EAR focuses on Metabolites & Enzymes derived from Plants or microbes, developing them as formulations (nano/micro) for bioremediation.

#### AI for Education

Department of CSE&IT hosts a centre of excellence on Artificial Intelligence for Education (CoE-AIE). The aim of CoE-AIE is to advance cutting-edge research and development in the fields of artificial intelligence to develop impactful solutions for empowering education and improving educational equity and quality. Currently, there are 5 ongoing projects, where the faculty experts from the department are working on different aspects of AI empowered education such as facilitating hearing impaired learners, providing personalized learning experience, and 24/7 assistance in learning.

#### Centre of Excellence on UAV and Electronic Border Security

The Center of Excellence on UAV and Electronic Border Security was established for the year 2022 with the goal of providing solutions for border security and improving drone security and privacy. The three broad areas of research are (a) low-flying drone detection (using an acoustic and electromagnetic wave approach), (b) compact smart antenna system design for border security, and (c) addressing security and privacy issues in unmanned aerial vehicles (UAVs). The COE also focuses on improving the student's activities at the UG and PG level in terms of projects and entrepreneurship in the area of radar and drone technology.



## JUIT, Wagnaghat

### Centre of Excellence in Healthcare Technologies and Informatics (CEHTI)

Centre for Healthcare Technologies and Informatics (CEHTI) was established by JUIT in 2017. CEHTI aims to improve the scientific and practical research in the field of health informatics on a global level and to use it in building a knowledge society. This centre focuses on recent developments in the health care sectors along with its coordination with rapidly developing informatics techniques. Various activities such as workshops, training programs and invited talks are regular feature of CEHTI. Workshop on Bioinformatics and Biomedical Image and Signal Processing is a biannual event of this Centre. Through this workshop, training is imparted on recent developments in genomics, proteomics, structural bioinformatics, NGS data analysis, systems biology, biomedical image & signal processing, machine learning, artificial intelligence, deep learning modules and their applications in health and medical sciences.

The centre conducted workshop on Bioinformatics and Biomedical Image Analysis (NBBIA) and International Webinar Series (IWS) is a well-accepted continuous activity of CEHTI since its inception and as on date 1500 people registered from all over the world for this series. IWS season-I was organized during July 2020 to January 2021 and IWS season - II was organized during August 2021 to December 2021. Renowned speakers delivered their talks to provide insights to faculty and students on Biomedical, Bioinformatics and Healthcare related recent developments. The center also conducted DST & DBT sponsored workshop on Statistical Techniques on Biological and Medical Sciences on June 17-23, 2022

### Centre for Sustainable Technologies for Rural Development

The vision of CESTRD, established at Jaypee University of Information Technology (JUIT) is to focus on the development of rural personnel and to benefit the people of all age groups irrespective of gender, race and financial category in Himachal Pradesh(H.P). The aim of the centre is to impart awareness about sustainable technologies for convenient livelihood in H.P. The sustainable technologies include renewable energy biofuels, pine briquettes, biofertilizers, rain harvesting, and water recycling. CESTRD is also determined to train the rural people about use of upcoming technologies for skill development and to upgrade their acquaintance about self employment and entrepreneurship. The centre targets the rural youth, women groups and rural development committees through continuous interaction programs, training and workshop sessions. The highlights of the Centre are:-

The Centre has established biogas reactors in JUIT campus, various Government Schools, Universities (Solan, Sirmaur, Bilaspur Districts) of Himachal Pradesh and

elsewhere (Air Force Station, Chandigarh – in 2020). These biogas reactors running on food waste and biogas fulfills the partial need for cooking the meals. The centre has also established biogas reactor for worker's families at JUIT. The Govt. of Himachal Pradesh and Jharkhand have empanelled JUIT as technical agency in biogas.

- The Centre organized international conference on 23rd to 24th November, 2021 in the field of Renewable Energy in collaboration with TIEDC, JUIT. Experts from USA, Brazil, Malaysia, IITs, Thailand delivered their invited lectures.
- The center transferred the Biogas Technology to Chitkara University Baddi, Solan, on 18th Feb, 2022.
- The CESTRD has developed vermicompost for the use of horticulture activities.
- The CESTRD imparted training on organic farming to students and faculty of various educational institutes.
- The centre organizes outreach programs for students and faculty of various schools, colleges and universities. On 09 October, 2021, the students from a Govt. College Punjab visited the centre.

### Centre of Excellence in Structural Engineering and Disaster Management (CESEDM)

The Centre of Excellence for Structural Engineering and Disaster Management was setup in the year 2018 in Department of Civil Engineering with the vision of creating and disseminating intellectual resources aimed at improving the overall quality of built environment, primarily focused at disaster risk assessment, reduction and management ensuring life safety within economic, physical, social, cultural, and environmental constraints. It has seven faculty members and two technical assistants. The major activities conducted under the aegis of the centre are: research, teaching, continuing education, consultancies, conferences and workshops. These activities are for the fundamental understanding and reasoning in the field of structural engineering, disaster resilience and building dynamics.

The primary areas of focus in the centre are: structural behavior subjected to various types of loading, design of specialty structures, research and development of advanced materials for structural and non structural applications, single and multi hazard assessment studies, structural health monitoring and continuous assessment of risk and vulnerability, design and development of green construction technologies, disaster preparedness and mitigation.

The centre encourages higher education in the field of structural engineering and disaster management. The centre has conducted numerous workshops/ symposia on basic understanding on concrete mix design methodology and high-performance

concrete, application of civil engineering software for research scholars, academicians, industry personnel's and government officials.

### **Centre of Excellence in "INTELLIGENT EVALUATION AND REHABILITATION OF STRUCTURES"**

Engineering in collaboration with Department of Computer Science and Information Technology, Jaypee University of Information technology, Wagnaghat set up a Centre of Excellence (CoE) named "Intelligent Evaluation and Rehabilitation of Structures" on 1st April 2022 under the Directorate of Innovation, Research and Development. Vision of this CoE is to become a leading model for endorsing resiliency and sustainability of infrastructure systems via integration of embedded sensing, intelligent control and advanced materials technologies and to promote disaster preparedness and rehabilitation capacity.

To achieve this vision as primary aim faculty members are working to develop a suitable technology to detect and mitigate the risk of landslide in hilly terrain, via utilization of advanced earth sensing and retaining techniques and AI based warning systems.

CoE is dedicated to the intelligent design and optimization of civil infrastructures with the help of artificial intelligence, machine learning, internet of things, smart materials and sustainable design, besides fostering preparedness about built environment vulnerability under natural calamities and developing resilient structural techniques to minimize the losses. Currently the board of the CoE consists of 7 faculty members from JUIT, Wagnaghat, 1 faculty member from IIIT, Noida and 2 external industry experts.

### **Mitsubishi Factory Automation Centre**

In its efforts to produce highly qualified, industry ready graduated in the current Industry 4.0 arena, Jaypee University of Information Technology has entered in to a Memorandum of Understanding with Mitsubishi Electric India Private Limited, a Company incorporated under companies act, 1956, Gurgaon, Haryana in May 2022. The main objective of this MoU is to spread awareness about automation amongst young Indian engineers and contribute to the Indian market through its products and technologies.

Under this MoU, MEI has given MEI will give Mitsubishi FA Training Equipment along with necessary programming software for simulation/programming to JUIT for demonstration, learning and training purposes. JUIT will come up with a comprehensive programme to train its students in Industrial Automation by workshops and summer trainings in near future to improve the prospects of students in their placements.

This lab offers a complete coverage on these topics to make students experts in automation domain. This lab offers: A course of Programmable Logic Controller to

develop programmes to meet the needs of a specific application and a course on HMI, Inverter, Servo Motor and XY Plotter Significance and there applications.

## **JUET, Guna**

### **Centre for Cement Research and Development (CRDC)**

Cement Research Development Centre at JUET, Guna was established with the aim of carrying out research in the areas of utilization of waste materials as cement additives and as raw materials. CRDC provides consultancy to cement industries and conducts short term training programs for the working personnel.

### **Jaypee Wind Engineering Application Centre (JP-WINCENTRE)**

State-of-the-art Boundary Layer Wind Tunnel (BLWT) facility is in an advanced stage of establishment at the JUET Campus, for providing innovative solutions to problems of industry and for undertaking quality research in wind engineering.

The Centre has been set-up with the vision of becoming a Centre of Excellence of international repute in the field of Wind Engineering.

### **Operator Trainee Simulator**

660 MW Super Critical Power Plant Simulator facility to train students and also to extend short term training to power sector industry personnel has been established. It is a generic simulator and a trainee gains in-depth knowledge of different components of super critical power plant operations.

### **Renewable Energy Centre**

Renewable energy, a sustainable source of energy, can replenish itself. This energy will play a pivotal role in damping climate change and fulfilling all the needs with low to nil greenhouse gas emissions. It is the energy obtained from Sun, Wind, Rain, etc. Out of all the sources, the potential of solar energy is very high. Hence, JUET has established a centre of excellence for Renewable Energy to meet the unmet gap between RE Industries and academia by doing the applied research in this field of renewable energies and providing technical support to companies and energy institutions in different areas: solar thermal applications, wind energy, photovoltaic solar energy and grid integration of energy., hydrogen energy, solar architectures and districts.

### **AR/VR AI/ML Robotics Development and Innovation Centre**

AR/VR/MR section of the centre offers hardware and software support for the development and innovation in AR/VR/MR. AR/VR/MR section of the centre provides opportunity to students to pursue the information and content visually using the

digital visual elements & sensory stimuli delivered via technology. Here students can pursue project and innovation ideas.

AI/ML and Robotics section offers computing and software facility for Artificial Intelligence and Machine Learning related aspects. Here students can pursue their specialization or project related activities in the area. This lab is also having a Robo Design Centre where student can create miniature models for various industrial robots.

## **CENTRES / CELLS**

### **Jaypee Incubation and Innovation Centre**

“It’s not about ideas. It’s about making ideas happen.” - Scott Belsky Jaypee Innovation and Incubation Center (JIIC) primary aim is to dispense development of innovation ecosystem and to engross faculty, research scholars, students, alumni and non-teaching staff in IPR, innovation and entrepreneurship related activities at JIIT by employing collaborative multidisciplinary efforts and skills. JIIC goal is manifold wherein we motivate student’s innovative engineering and entrepreneurial thinking, set up institutional innovative research goals, generate significant IPR rights, promote participative innovative leadership, encourage national and international research and act as a catalyst for a step change in the JIIT’s innovation capacity and compact. JIIC is also committed to foster student’s innovation and entrepreneurial skills, develop mentorship ecosystem, offer a dynamic platform for cutting edge and path-defining learning’s and support innovations focusing on real-life problems. JIIC is also determined to engage JIIT faculty, students and staff in various “out of the box” innovation and entrepreneurship related activities such as ideation, feasibility, planning, design thinking, problem solving, evaluation and coordination from Pre-incubation to incubation phase.

### **Online Education Cell**

In tune with the changing times of technology-driven education, and making the teaching- learning progression accessible and inclusive, the Online Education Cell strives to set global standards in offering online and blended learning routes available for the student community. The cell also ensures that the quality of online/ blended courses matches the standards set by national and international regulators/ universities and evolves keeping pace with those standards. The guidelines developed by the cell, emphasizes on continuous improvement of the teaching-learning process. A focus on seamlessly merging in-classroom teaching with online/blended modes ensures flexibility, beneficial to the learners in ensuring continuity of education beyond physical classroom hours, and contributing to possibilities of learners being

able to merge work-skills with continuing education, with neither being a barrier due to time- space constraints and being location- independent.

### **Technology Solutions for Soil & Water Remediation (TSSR)**

Rapid industrialization, increased productivity demands and environmentally inappropriate human activities continuously challenge natural resources including Soil, Air, & Water. Multiple pollutants generated as refuse/effluent present serious environmental threats. Biotechnology offers economical and safe solutions to restore Soil, & Water quality through application of a choice of plants & microbes. At TSSR, we propose to address issues of soil & water pollution broadly subdivided into three subdivisions namely: MAR - Microbe Assisted Remediation, PAR - Plant Assisted Remediation, EAR – Enzyme Assisted Remediation. In MAR, Bacteria & Fungi with proven bioremediation capabilities would be employed for clean-up processes in soil / water environments. Under PAR, chosen phytoremediator plants will be applied to decontaminate soil/water of organic and inorganic pollutants. EAR focuses on Metabolites & Enzymes derived from Plants or microbes, developing them as formulations (nano/micro) for bioremediation.

#### **Sub-divisions in TSSR:**

MAR - Microbe Assisted Remediation: Prof. Krishna Sundari, Prof. Indira P. Sarethy  
PAR - Plant Assisted Remediation: Prof. Pammi Gauba, Dr. Ekta Bhatt  
EAR - Enzyme Assisted Remediation: Prof. Neeraj Wadhwa, Dr. Garima Mathur

#### **Objectives:**

1. Microbe-mediated remediation of polluted water and pesticide residues in soil
2. Phytoremediation of PPCPs and heavy metals
3. Enzyme-mediated remediation of polluted water bodies

### **Centre for MEMS (Micro Electro Mechanical System) Design**

A National MEMS Design Center (NMDC) at JIIT has been established under the National Program on Micro and Smart Systems (NPMASS) in the year 2009 as a part of the institute’s response to launch MEMS activity. The program focuses on collaborative research efforts related to MEMS and smart sensors by the Department of Electronics and Communication Engineering and the Department of Physics and Materials Science, JIIT Noida. The departments involved promote the area of sensors and smart systems through independent departmental courses at the UG and PG levels to involve students and faculty in developing MEMS-related projects and research activities. In the absence of comprehensive in-house facilities for complete fabrication of MEMS-based sensors and actuators, the approach is to focus on MEMS

device design, modeling, and characterization, with outside foundries chosen as an option for fabrication and packaging.

### **Centre for Innovation in VLSI and Smart Systems (CIVSS)**

The Centre aims to work on the emerging technologies of VLSI, Internet of Things (IOT), AI and Embedded Systems through democratization of innovation, standardization, realization of prototype and products which leads to better job prospect, Incubation and overall development. Established in 2019, the Centre offer complete chip design expertise from RTL to GDSII implementations upto 22nm technology node including pre silicon testing & FPGA/Simulation-based prototyping. The vision of the Centre is to become a worldwide coveted landmark of scientific knowledge, expertise, and cutting-edge technology in VLSI, Smart Systems and other related fields, while also serving as a boon to global growth and society.

### **Prayag - A Centre for Knowledge Informatics for Sustainable Development**

This centre contributes towards enhanced understanding of diverse human activities with an emphasis on sustainable development through an informatics inclusive cross-disciplinary approach. Main objectives of this centre are to incubate informatics inclusive cross-disciplinary R&D in newer, relatively unexplored and divergent application domains with a special focus on sustainability; to inspire and encourage academia (both faculty and students) for Sustainable Technology Research in the area of Energy Activities, Clean Water and Air, Green Chemistry, Healthy Living etc. and to promote Cross-disciplinary practices and approaches for Sustainable Development.

Centre for Performance Modelling of Computing Systems (CPMCS) Centre for Performance Modelling of Computing Systems (CPMCS) has been initiated to provide a platform to researchers to share their experiences, insights, and challenges regarding modeling, simulation and performance evaluation in all areas of computer science engineering and information technology. Specifically, the academic activities of this centre are focused on modelling and simulation of computer networks (wired & wireless), wireless sensor networks, distributed systems, multimedia systems and techniques, databases & data mining techniques, computer architectures and processors, algorithms, social networks, software & information systems etc. A number of post graduate students and research scholars contribute towards this endeavor resulting in good number of publications. CPMCS is equipped with latest machines and multi core processors for high end computing.

### **Centre for Micro Electro Mechanical Systems (MEMS)**

The Centre for MEMS Design was set-up at IIIT in the year 2009 as a part of Institute's response to launch MEMS activity NPMASS program. The National Program on Micro and smart Systems (NPMASS), under Government of India was wholly supported by Defense Research & Development Organization (DRDO) through Aeronautical Development Agency (ADA) and was endorsed by the five departments of DRDO, DOS, DST, CSIR and DIT. The co-coordinating institute is IISc Bangalore.

The program centers on collaborative research efforts, related to MEMS and smart sensors, of the Department of Electronics and Communication Engineering and Department of Physics and Materials Science. Under this project IIIT has been provided with three industry standard MEMS software packages namely Coventor Ware (01 license) and MEMS Plus (01 license), Intellisuite 8.7 (01 license) and COMSOL Multi physics (32 licenses), all software's licenses are perpetual in nature. The hardware support for the project has been provided by IIIT, which includes a dedicated Server, Vector Network Analyzer and eleven workstations in MEMS Lab - I. For designing and simulation of interfacing integrated circuits, five licenses of Mentor Graphics IC design tool and Synopsys IC design tools are installed and regularly used by students and faculty. The departments promote the area of sensors and smart systems through independent departmental courses at UG/PG levels to involve students and faculties in developing MEMS related projects and research activities. Elective and Core courses are run by the ECE department for promoting research activities in this emerging area.

The research areas in MEMS in IIIT are Sensor/ MEMS Interface CMOS Analog Chip Design, On-Chip RF Spiral Inductor Development, SAW based Temperature/ Gas Sensor design and Advanced and Smart Materials.

### **Centre for Emerging Diseases**

Despite noticeable improvements in combating the global burden of newly emerged, re-emerged infectious and life-style diseases, millions of patients still targeted to the unbridged gap in mechanistic understanding. Research at the Centre of Emerging Diseases focuses to delve into underlying molecular events behind pathogenesis of emerging viral and bacterial pathogens (host pathogen interactions, essential metabolic pathways of pathogens), along with life-style diseases such as cancer, cardiovascular diseases, etc. The faculty uses integrative structural biology approach to design novel diagnostics and therapeutics. The research activities at the Centre has generated ~ 10 crore extramural research funding from various agencies of Govt.

of India including Department of Biotechnology (DBT), Department of Science & Technology (DST), Indian Council of Medical Research (ICMR) and All India Council for Technical Education(AICTE).

### **Centre for Plant and Microbial Biotechnology**

The advances in research around the working of nature using biotechnology presents interesting opportunities to apply these principles to different fields of science. Our utmost priority is to find sustainable solutions to address the concerns on improving crop productivity, depleting natural resources, environmental pollution, safety of food and agricultural products. The increasing demand for naturally derived bioactive components of therapeutic and industrial importance (in the areas of healthcare,

environmental remediation, agriculture biotechnology) corroborates the pursuit of natural and sustainable progression. The research activities at the Center for Plant and Microbial Biotechnology comprehensively focus on inter disciplinary fields of Bioresources, Biorefining, Bioremediation of Organic and Inorganic Pollutants, Enzymes for Environment, Food, Industrial Applications, Biofertilizer, Biocontrol Agents for Agriculture Improvement, and Natural Products for Healthcare Applications. The Center has Garnered extra mural funding from Department of Biotechnology (DBT), Department of Science & Technology (DST), Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Ministry of Environment, GoI and Council of Science and Technology, U.P



# Entrepreneurship Development Centre

## JIIT, Noida

### Jaypee Entrepreneurship Development Centre

The centre has been set up at JIIT to provide a platform to foster innovation activities and motivate, guide and support JIIT students to become technology entrepreneurs. The centre creates and provides a network of experts to mentor students to elaborate, validate and refine innovative ideas for developing socially useful and commercially viable products and services.

## JUIT, Wagnaghat

### Technology Incubation & Entrepreneurship Development Cell (TIEDC), (JUIT)

The Jaypee University of Information Technology has a Technology Incubation and Entrepreneurship Development Cell (TIEDC). The TIED cell focus on harnessing the talents and research strengths available in the area of different engineering disciplines and apply the same to socially relevant projects in the form of start-up ventures. The main objectives of the incubation centre is to help budding Entrepreneurs to acquire necessary managerial skills to run their business venture through the process on mentoring support and by the same time to conduct Entrepreneurship Program and Workshops in order to develop Entrepreneurship, Innovation skills among the youths. TIEDC is supported by the Department of Industries, Himachal Pradesh under Chief Minister's Startup /Innovation Projects/ New Industries Scheme

## JUET, Guna

### Entrepreneurship Development Cell (EDC) , (JUET)

The Jaypee University of Engineering and Technology has Entrepreneurship Development Cell (EDC). The objective of the EDC is to motivate students to start their own and promoting specialized knowledge in the field of entrepreneurship development. EDC is led by students and mentored by faculty members. The EDC cell facilitates the students to explore entrepreneurship options, building up networks, participate in various summits and competitions. The EDC cell is actively participating in various activities related to entrepreneurship to name a few participations in National Entrepreneurship Challenge, IIT Mumbai (reached semi-final), Business Model Competition – Eureka IIT Mumbai (got appreciation), poster making competition.



## Foreign Collaborations/MOUs

The Jaypee Universities (JIIT, JUIT & JUET) have collaborations/ understandings with foreign universities, aimed at academic development and exchange, in mutual areas of interest.

These are listed below

1. University of Florida, International Center, Gainesville, Florida, USA. The selected students have options to do their 8th semester at a nominal fee at University of Florida & Nebraska, USA. Most of such students have also got admissions in respective MS program and placement in US.

2. College of Information Science & Technology, The Peter Kiewit Institute of Information Science, Engineering & Technology, University of Nebraska, Omaha.
3. South Dakota School of Mines & Technology, USA
4. Youth Development Fund, Bhutan
5. University of Malta



# Vision and Mission and Program Education Objectives

## JIIT

### VISION

To become a Center of Excellence in the field of IT & related emerging areas 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

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

## CSE & IT

### VISION

To be a centre of excellence for providing quality education and carrying out cutting edge research to develop future leaders in all aspects of computing, IT and entrepreneurship.

### MISSION

- MISSION 1:** To offer academic programme with state-of-art curriculum having flexibility for accommodating the latest developments in the areas of Computer Science and IT
- MISSION 2:** To conduct research and development activities in contemporary and emerging areas of Computer Science & Engineering and IT.
- MISSION 3:** To inculcate IT & entrepreneurial skills to produce professionals capable of providing socially relevant and sustainable solutions

## PROGRAM EDUCATION OBJECTIVES (PEO)

### B.TECH IN CSE

- PEO 1: To provide core theoretical and practical knowledge in the domain of Computer Science & Engineering for leading successful career in industries, pursuing higher studies or entrepreneurial endeavors.
- PEO 2: To develop the ability to critically think, analyze and make decisions for offering techno-commercially feasible and socially acceptable solutions to

real life problems in the areas of computing.

- PEO 3: To imbibe lifelong learning, professional and ethical attitude for embracing global challenges and make positive impact on environment and society.

### B.TECH IN IT

- PEO 1: To impart core theoretical and practical knowledge of Computer Science & Engineering and emerging Information Technologies for leading successful career in industries, pursuing higher studies or entrepreneurial endeavours.
- PEO 2: To develop the ability to critically think, analyze, design and develop IT based solutions.
- PEO 3: To imbibe the life-long learning and understanding of ethical values, their duties toward environmental issues and sensitize them toward their social responsibility as IT professional.

### M.TECH IN CSE

- PEO 1: To prepare professionals who will have successful career in industries, academia, research and entrepreneurial endeavours.
- PEO 2: To prepare graduates who will demonstrate analytical, research, design and implementation skills offering techno-commercially feasible and socially acceptable solutions to real life problems.
- PEO 3: To prepare graduates who will thrive to pursue life-long learning and contribute to society as an ethical and responsible citizen.

## ECE

### VISION

To be a centre of excellence in education, training and research in Electronics and Communication Engineering to cultivate technically competent professionals for Industry, Academia and Society.

### MISSION

- MISSION 1: To impart education through contemporary, futuristic and flexible curricula with innovative teaching learning methods and hands on training with well equipped Labs.
- MISSION 2: To carry out cutting edge research in different areas of Electronics and Communication Engineering.



MISSION 3 :To inculcate technical and entrepreneurial skills in professionals to provide socially relevant and sustainable solutions.

## PEO

### B.TECH IN ECE

PEO 1: To provide strong foundation in Electronics and Communication Engineering to pursue professional career, entrepreneurship and higher studies. PEO 2: To evolve capability to analyze, design and develop feasible solutions to real world problems.

PEO 2: To inculcate professional ethics, managerial and communication skills to Develop ingenious solutions for the benefit of society and environment.

### M.TECH. IN ECE

PEO 1: To provide strong foundation in Electronics and Communication Engineering to pursue professional career, entrepreneurship and higher studies.

PEO 2: To evolve capability to analyze, design and develop feasible solutions to real world problems.

PEO 3: To inculcate professional ethics, managerial and communication skills to develop ingenious solutions for benefit of society and environment.

## BIOTECHNOLOGY

### VISION

To be a centre of excellence in Biotechnology for providing quality education and carrying out cutting edge research to produce professionals, innovators, researchers and entrepreneurs.

### MISSION

MISSION 1: To offer contemporary, futuristic and flexible curricula of Biotechnology for teaching and training.

MISSION 2: To carry out globally acceptable cutting edge research through sponsored projects and to provide state of art laboratories for experimental work.

MISSION 3: To develop bio safe, socially ethically and environmentally acceptable solutions to address health, environmental, industrial, entrepreneurial and societal concerns

## PEO

### B.TECH IN BT

PEO 1: To provide fundamental and practical knowledge in the field of Biotechnology

for pursuing research career in industry and academia.

PEO 2: To impart analytical and research skills and nurture entrepreneurial endeavours.

PEO 3: To develop biotechnologists with professional ethics to address global and societal issues for sustainable development

### M.TECH IN BT

PEO 1: To impart advanced theoretical and practical knowledge in Biotechnology and allied fields.

PEO 2: To provide domain knowledge and expertise for successful career in academics, research and industry.

PEO 3: To develop ethically and socially responsible professionals with leadership and entrepreneurship skills

### M.SC IN MICROBIOLOGY

PEO 1: To impart advanced theoretical and practical knowledge in Microbiology and allied fields of Biotechnology.

PEO 2: To enhance knowledge and expertise for a successful career in academics, research and industry.

PEO 3: To develop professionals with social, environmental and ethical awareness.

### M.Sc. IN ENVIRONMENTAL BIOTECHNOLOGY

PEO 1: To impart advanced theoretical and practical knowledge in Environmental Biotechnology and allied fields.

PEO 2: To enhance knowledge and expertise for a successful career in academics, research and industry.

PEO 3: To develop professionals with social, environmental and ethical awareness.

## PMSE

### VISION

To be a centre of excellence in teaching and research in Physics and Materials Science and Engineering

### MISSION

MISSION 1: To offer academic programs and courses in the areas of Physics and Materials Science for nurturing manpower with analytical and independent thinking and scientific temperament.

MISSION 2: To conduct fundamental and applied research in emerging areas of Physics and Materials Science.

MISSION 3: To foster interaction and collaboration with national and international bodies and institutions for enrichment, application and transfer of knowledge in Physics and Materials Science.

## PEO

### M.SC IN PHYSICS

PEO 1: To impart advanced theoretical and practical knowledge in the areas of Physics

PEO 2: To provide training and expertise to achieve career goals in academics, research and related industry.

## MATHEMATICS

### VISION

To be a centre of excellence in teaching and research in basic and applied areas of Mathematics.

### MISSION

MISSION 1: To offer academic programs and courses in contemporary and emerging areas of Mathematics and its applications to develop analytical and problem solving skills.

MISSION 2: To carryout quality research in emerging areas of Pure and Applied Mathematics. MISSION 3: To foster interaction with national and international institutions for enrichment, application and dissemination of knowledge in Mathematics.

## PEO

### M.SC IN MATHEMATICS

PEO 1: To impart advanced theoretical and computational knowledge in the areas of mathematics

PEO 2: To provide training and expertise to achieve career goals in academics, research and related Industry.

### B.SC. IN COMPUTER SCIENCE

PEO 1: To provide theoretical and practical knowledge in the domains of Computer Science, Information Technology and Scientific Computing for leading successful career in industries, entrepreneurial endeavours or pursuing higher studies.

PEO 2: To develop the ability to critically think, analyse and make decisions for offering commercially feasible and socially acceptable solutions to real life

problems in the areas of Computer Science, Information Technology and Scientific Computing.

## HUMANITIES AND SOCIAL SCIENCES

### VISION

To be a centre of excellence in preparing professionals by imbibing human values and to carry out contemporary and futuristic research in humanities and social sciences.

### MISSION

MISSION 1: To provide socially relevant and high quality professional education in a Wide range of inter-disciplinary areas of humanities and social sciences.

MISSION 2: To conduct quality research in different areas of humanities and social sciences.

MISSION 3: To imbibe pluralistic values, democratic and equalitarian doctrines of the society at large.

## DEPARTMENT OF COMPUTER APPLICATION

### VISION

To become a centre of excellence to produce skilled applied computing professionals who not only possess sound theoretical knowledge but also have a rigorous hands-on experience to lead, innovate, venture in entrepreneurship, adapt to evolving technologies, and make a positive and effective contribution to the society.

### MISSION

MISSION 1: To inculcate sound theoretical knowledge, practical experience, ethical value and professionalism through futuristic curriculum.

MISSION 2: To conduct activities for developing competencies for innovation, entrepreneurship, research and pursuing higher education.

MISSION 3: To empower individuals with practical experience in cutting-edge tools and technologies to create computer applications addressing societal and industrial needs.

## PEO

### B.C.A

PEO 1: To impart core theoretical as well as practical skills in software development to build competencies for creating real-world computer applications in diverse domains.

PEO 2: To imbibe lifelong learning in graduates and prepare them for successful careers in software and IT-enabled industry as well as in entrepreneurship,

research and higher studies with all the ethics and professionalism.

PEO 3: To develop strong oral and written communication skills in graduates to effectively convey technical concepts and collaborate with team members, clients, and stakeholders.

### M.C.A

PEO 1: To develop strong theoretical and practical knowledge in computing to proficiently build software applications solutions for societal and industrial needs.

PEO 2: To prepare the graduates to pursue career as entrepreneurs and innovators; software developers or pursue higher education and research.

PEO 3: To demonstrate excellent oral and written communication skills and collaborative working in teams, exhibiting ethical standards, leadership and project management capabilities.

## JUIT

### VISION

To become a centre of excellence in the field of IT and 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

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

## CSE & IT

### VISION

- To become a Center of Excellence in the Computer Science & Engineering and Information Technology (CSE&IT) discipline with state of art research and teaching environment.

### MISSION

#### PEO

### B.TECH IN CSE

PEO 1: To enhance professional skills for developing analytical & computational models and technical tools.

PEO 2: To promote self-learning abilities and team management skills.

PEO 3: To sensitize students towards issues of social relevance, openness to other international cultures and to introduce them to professional ethics & practice.

### B.TECH IN IT

PEO 1: To provide a solid technical foundation required for comprehending, analyzing and designing novel products and technologies.

PEO 2: To inculcate the ability to gain multidisciplinary knowledge and to innovate & contribute through the leadership and entrepreneurship skills

PEO 3: To promote awareness towards issues of social relevance and introduce them to professional ethics and practice.

### M.TECH IN CSE (INFORMATION SECURITY)

PEO 1: To create professionals who will be handling the real-life problems and challenges in connection to cyber security.

PEO 2: To communicate knowledge pertinent to the current state arts in the field of Information Security.

PEO 3: To apply modern programming techniques, advanced languages, lab equipments, and management tools to resolve the various issues related to Industry standards.

### M.TECH IN CSE (DATA SCIENCE)

PEO 1: To utilize mathematical models and statistical data analysis with necessary engineering to solve real-world problems.

PEO 2: To design storage structures and other appropriate algorithms using data visualization, and machine learning techniques.

PEO 3: To apply artificial statistics and computational analysis for data to predict and represent knowledge.

## BT & BI

### VISION

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

### MISSION

MISSION 1: The outcome based teaching/learning practices to harness human capital for sustainable competitive edge and social relevance.

MISSION 2: To develop a research-based education model in Biotechnology and Bioinformatics.

## PEO

### B.TECH IN BIOTECHNOLOGY

PEO 1: To provide basic and advance knowledge in biotechnology and related disciplines for achieving advancements in academia and industry

PEO 2: To inculcate analytical, research skills and entrepreneurial endeavours to develop innovative products/processes for the societal benefits

PEO 3: To develop team spirit and ethical behavior for working successfully in industry, academia, and government organizations.

### B.TECH IN BIOINFORMATICS

PEO 1: Enrich knowledge in Bioinformatics domain to integrate techniques across disciplinary boundaries.

PEO 2: Enable to identify, analyze and solve real world problems with skills and Novelty in computational biology.

PEO 3: Inculcate spirit of team work, constructive thinking, ethical behaviour and professionalism.

### TECH IN BIOTECHNOLOGY

PEO 1: To impart basic and advance knowledge in various domains of Biotechnology.

PEO 2: To impart the laboratory skills to cater the needs of industries and high End research.

PEO 3: To inculcate team work with ethics to solve scientific problems using multidisciplinary approaches.

### M.SC IN BIOTECHNOLOGY

PEO 1: To impart fundamental and applied knowledge across domains of Biotechnology.

PEO 2: To inculcate skills for problem identification and sustainable solutions involving biotechnological interventions.

PEO 3: To educate students in biotechnology for entrepreneurship and industrial applications.

### M.SC IN MICROBIOLOGY

PEO 1: To impart advanced theoretical and practical knowledge across domains of Microbiology

PEO 2: To enhance knowledge and skills for a successful career in industry and academics

PEO 3: To develop trained professionals with ethics and entrepreneurship skills for providing sustainable solutions

## CIVIL ENGINEERING

### VISION

To strive for excellence, knowledge creation and research contribution to 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 centres of research and education in all the areas of Civil Engineering.

### MISSION

MISSION 1: To provide a vibrant educational environment in the competitive field of Civil Engineering keeping in view the emerging infrastructural needs of the country.

MISSION 2: To keep pace with the advances in Civil Engineering techniques and technologies to provide training and skills for creative, innovative and ethical attitude.

MISSION 3: To provide state-of-the-art skills and knowledge to the students to become leaders in the world of Civil Engineering.

## PEO

### B.TECH IN CE

PEO 1: To utilize appropriate theoretical, modelling concepts and communication skills in dealing with real life engineering problems

PEO 2: To advocate the principle of self-learning and utilization of integrated knowledge through industrial and research training for benefitting the society effectively.

PEO 3: To conceptualize, develop and complete large scale projects within the time frame along with adaptability to other international cultures within professional ethos and ethics.

### B.TECH IN CEC

PEO 1: To solve the real-life engineering problems demanding technical temperament and providing efficient and sustainable solution through modern computation techniques in civil engineering.

PEO 2: To encourage students towards analytical approach to fulfil the needs of the industry & academia at national and international level.

PEO 3: To inculcate research aptitude in graduating students, and equip them with latest technological advancements in various domains of civil engineering with professional ethics.

#### **M.TECH IN CE (STRUCTURAL ENGINEERING)**

PEO 1: To utilize appropriate theoretical, practical and modeling concepts in dealing with real-life structural engineering problems, finding their effective solutions.

PEO 2: To enable the students to apply latest design codes to solve complex problems and to motivate them in interdisciplinary research related to Structural Engineering.

PEO 3: To familiarize the graduate students to high value research related to Structural Engineering and to motivate them in interdisciplinary involvement.

#### **M.TECH IN CE (ENVIRONMENTAL ENGINEERING)**

PEO 1: To enable the students to undertake safe, economical and updated design principles for solving complex environment related problems.

PEO 2: To acquire the analytical ability to analyze, formulate, and solve problems in the field of Environmental Engineering.

PEO 3: To provide theoretical and practical knowledge of Environment Engineering, managerial and entrepreneurial skills to enable students to contribute to the well-being of society with a global outlook.

#### **M.TECH IN CM (CONSTRUCTION MANAGEMENT)**

PEO 1: Graduates of the programme will become effectively as construction engineers and managers in government, industry, or other organizations; designing, improving, and implementing efficient engineering practices.

PEO 2: To provide solutions to construction engineering and management problems that account for economical, societal, ethical by applying acquired engineering knowledge.

PEO 3: To impart training to the students to gain capabilities to work effectively with multi-domain professional teams in collaboration and exhibit strong Leadership quality, communication and interpersonal skills in the profession.

### **ECE**

#### **VISION**

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

### **MISSION**

MISSION 1: To provide globally comparable teaching and learning environment through theoretical and practical knowledge.

MISSION 2: To promote through establishment of research centres of excellence in niche technological areas to nurture the spirit of innovation and creativity.

MISSION 3: To produce professionals capable to work in a team or individual to tackle the rapidly changing requirement of the society.

### **PEO**

#### **B.TECH IN ECE**

PEO 1: To identify, formulate, and solve complex engineering problems by applying principles of engineering, science and mathematics.

PEO 2: To recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental and societal contexts.

PEO 3: To make students able to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks and meet objectives.

#### **B.TECH IN ECM**

PEO : To be reputable and recognized as a respected professional and efficient communicator in industries linked to computer and electronic technology.

PEO 2: To exercise their career in a combined, team-oriented manner that embraces the multidisciplinary and multicultural atmosphere of today's corporate world.

PEO 3: To be capable enough to function as a liable member of the world with enthusiasm to mentor fellow employees and an understanding of the moral, societal and financial impact of their effort in a global perspective.

#### **M.TECH IN ECE**

PEO 1: To expand student's understanding and investigative skills in electronics and computer engineering so that they may utilise the best knowledge and skills to the test and design advanced systems.

PEO 2: To provide the motivation that allows graduates to continue research in the fields of electronics and/or computer engineering.

PEO 3: To prepare students to accomplish something novel during research program in electronics and computer engineering or a related field.

### **M.TECH IN ECE (INTERNET OF THINGS)**

PEO 1: To explain in a crisp mode how the common Internet as well as Internet of Things work.

PEO 2: To recognize restriction and prospect of wireless and mobile networks for Internet of Things.

PEO 3: To be able to use basic measuring tools to resolve the real-time performance of packet based networks.

## **HUMANITIES AND SOCIAL SCIENCES**

### **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**

MISSION 1: To facilitate students and professionals to become Innovative, Competitive and Enterprising in their chosen fields.

MISSION 2: 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.

MISSION 3: To bridge the gap between academia and industry by incorporating contemporary concepts and practices in our courses.

## **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**

MISSION 1: To provide an environment to learn and be competent users of advanced Mathematical tools.

MISSION 2: To provide solid foundation in mathematics for building up their reasoning and analytical skills.

MISSION 3: To produce ethical, motivated and skilled Mathematicians to pursue higher studies.

## **PMS**

### **VISION**

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 and internationally recognized unique model for physics and materials science education in both public and professional spheres.

### **MISSION**

MISSION 1: To promote outcome based education to prepare students for variegated challenges in industry and academia.

MISSION 2: To provide a panorama of courses imparting teaching, research and mentoring opportunities for graduate students.

MISSION 3: The department is dedicated to provide teaching and encourage collaborative learning in Physics & Materials Science in a performance based active academic environment.

## **JUET**

### **VISION**

Playing a pivotal role to enable the country and state of Madhya Pradesh, in particular, in developing high caliber trained manpower in the frontier areas of Technologies

### **MISSION**

To make the university a 'Center of Excellence' in the field of Engineering and Technology with highly developed infrastructure, excellent faculty with an international outlook and active interaction with the industry.

## **CIVIL ENGINEERING**

### **VISION**

To disseminate state-of-art knowledge by empowering graduates to design, develop and effectively lead in the area of Civil Engineering through an advanced understanding of globalization and sustainability to serve the society.

### **MISSION**

MISSION 1: To impart quality education that brings out Civil Engineers with high

technical competencies and promotes high-end research to meet challenges in Civil Engineering.

MISSION 2: To develop students with sound knowledge of contemporary philosophies of design and innovation, including IT based solutions and entrepreneurship skills.

MISSION 3: To empower graduates with multidisciplinary approach and sound technical knowledge to fulfil societal needs.

#### **M.TECH IN STRUCTURAL ENGINEERING**

PEO 1: To enunciate, analyze, design, and solve real-world problems in Structural Engineering; and identify and develop the suitable modern engineering tools for the same.

PEO 2: To equip the students with sound technical, managerial and professional skills in core and allied areas for on-the-spot employability in the industry.

PEO 3: To develop multidisciplinary approach and harmonize engineering research concepts to social and humanitarian cause through the development of strong ethical values and practices.

#### **M.TECH IN CONSTRUCTION MANAGEMENT**

PEO 1: Identify and apply sustainable, alternative and cost effective construction materials and practices.

PEO 2: Apply systems, methods, procedures, modern tools and techniques in construction projects.

PEO 3: Work in team environment and apply tools to optimize resources for achieving project objectives.

#### **M.TECH IN ENVIRONMENTAL ENGINEERING**

PEO 1: Graduates of the programme will become effectively as Environmental Engineers in government, industry, or other organizations; designing, improving, and implementing efficient Environmental Engineering practices that is sustainable.

PEO 2: Graduates of the programme will provide solutions to environmental engineering problems that account for economical, societal, ethical, as well as with standards both as individuals and in team environments, by applying acquired engineering knowledge.

PEO 3: The programme will continue their lifelong learning to remain effective professionals to maintain and enhance technical and professional growth.

## **CSE**

### **VISION**

Transforming students to become the New-age, Innovating, Competitive and Enterprising leaders in their chosen professions of service and technology.

### **MISSION**

MISSION 1: To serve as a 'Centre of learning' dedicated to disseminate knowledge pertaining to Technical skills in the field of Computer Science and Information Technology among students.

MISSION 2: To conduct innovation, research and development activities in contemporary and emerging areas of Computer Science & Engineering and IT.

MISSION 3: To inculcate Information Technology & entrepreneurial skills to produce professionals capable of providing socially relevant and sustainable solutions.

## **PEO**

### **B.TECH IN CSE**

PEO 1: To provide core theoretical knowledge and practical exposure in the area of Computer Science & Engineering to help students excel in their professional career, pursuit of higher studies, or their entrepreneurial endeavours.

PEO 2: To enable the students to use existing knowledge and create the new Knowledge using multiple disciplines in solving real-life problems.

PEO 3: To develop the professional attitude and ethical competencies, so that the students would be able to face the work-life and personal challenges with utmost grace, and make positive impact on the environment and society.

### **M.TECH IN CSE**

PEO 1: Practice with an expertise in academics, entrepreneurship, design and development in computing technology, or research in a specialized area of computer science and Engineering to pursue higher studies.

PEO 2: Exhibit analytical, decision making and problem – solving skills by applying research principles for handling real life problems with realistic constraints.

PEO 3: Ability to communicate the findings or express innovative ideas in an effective manner with an awareness of professional, social and ethical responsibilities.

## ECE

### VISION

To develop technically skilled man power to take up challenges of industries in field of communication, information technology, electronic system design and undertake research on front areas to address societal needs which support the economic growth of the country.

### MISSION

MISSION 1: Develop teaching methodologies to inculcate innovation and skills among the students.

MISSION 2: Encourage faculty to take part in research and collaboration with other University and Industry professionals, and create knowledge for the future technologies.

## PEO

### B.TECH IN ECE

PEO 1: Provide graduates with a strong foundation in mathematics, science and engineering fundamentals to enable them to devise and deliver efficient solutions to challenging problems in Electronics, Communications and allied disciplines.

PEO 2: Provide sound theoretical and practical knowledge of E&C Engineering, managerial and entrepreneurial skills to enable students to contribute to the well being of society with a global outlook.

PEO 3: Inculcate qualities of team work as well as social, interpersonal and leadership skills and an ability to adapt to evolving professional environments in the domains of engineering and technology.

### M.TECH IN ECE

PEO 1: To provide profound knowledge of modern design tools to solve real-life problems in the field of Electronics and Communication Engineering.

PEO 2: To inculcate research skills with ethical attributes for academia and industry.

PEO 3: To develop entrepreneurial skills as per industry requirements for providing sustainable solutions to the society.

## MECHANICAL ENGINEERING

### VISION

To cultivate, nurture and empower the young minds with the knowledge, skill set,

values and attitude to solve problems at the grass roots level of the society, thus to be recognized internationally as one of the finest centers of excellence in various aspects of Mechanical Engineering.

### MISSION

MISSION 1: Prepare students for careers in industry, academia and government organization in mechanical and allied engineering.

MISSION 2: Perform mechanical engineering based research and other scholarly activities.

MISSION 3: Interact with industry and government establishments and provide them technical knowledge and support.

## PEO

### B.TECH IN ME

PEO 1: Create awareness about the multitude of applications of Mechanical Engineering in improving the quality of life.

PEO 2: Develop fundamental understanding and skill-set to use basic concepts derived through the laws of nature.

PEO 3: Provide conventional as well as IT enabled environment to foster learning, research, innovation and entrepreneurship.

### M.TECH IN ME (MANUFACTURING TECHNOLOGY)

PEO 1: Create a congenial milieu for the scholars that impart ability to work with multi- disciplinary groups in professional, industry and research organizations.

PEO 2: Provide guidance to the students for the selection of their research problems and professional career out look.

PEO 3: Ability to promote the design of manufacturable products, apply the new competent manufacturing processes and improve the performance of existing processes.

## CHEMICAL ENGINEERING

### VISION

To produce graduate engineers capable of contributing to the requirements of the industry and conducting research & constancy to meet global standards as well as the aspirations of the scientific community.



## MISSION

MISSION 1: Impart quality education in Chemical Engineering and allied areas.

MISSION 2: Foster research and development activities among faculty and students in order to serve the needs of society.

## PEO

### B.TECH IN CHEMICAL ENGINEERING

PEO 1: To produce graduate Chemical Engineers capable of meeting current and future challenges of chemical industries by providing them excellent infrastructure and facilities.

PEO 2: To equip graduates with the sound knowledge of Chemical Engineering fundamentals to formulate, analyze chemical engineering and related problems so that these graduates are capable of handling multifaceted problems.

PEO 3: To inculcate ethical practices in the graduates and basic concepts of intellectual skills, courage, integrity, awareness and sensitivity to the needs and aspirations of the society.

### M.TECH IN CHEMICAL ENGINEERING

PEO 1: To enable students conduct applied scientific research in various fields of Chemical Engineering.

PEO 2: Exhibit necessary skills, knowledge and deep understanding to deal industrial problems with a scientific outlook.

PEO 3: Ability to communicate clearly and concisely the research findings with the scientific community by adhering to the social and professional ethics.

## CHEMISTRY

### VISION

To nurture the young minds with strong understanding of Chemistry to fulfill the dreams of Society and Nation.

## MISSION

To inculcate fundamental skills by excellent teaching with a view to provide quality work force to Industry

## HUMANITIES AND SOCIAL SCIENCES

### VISION

To be a center of excellence for overall development of students by grooming, nurturing and inculcating universal human values and to carry out quality research.

### MISSION

MISSION 1: To provide socially relevant and high-quality professional education in a wide range of inter-disciplinary areas of Humanities and Social Sciences to all the students

MISSION 2: To conduct quality research in different areas of Humanities and Social Sciences.

MISSION 3: To imbibe universal human values and ethical doctrines of the society at large in the students.

## MATHEMATICS

### VISION

To produce leaders with excellent analytical skills through mathematics education and training the students in acquiring conceptual understanding of Mathematics, its logical, cognitive and operational processes and applications.

### MISSION

MISSION 1: To strive by introducing the students to main ideas and methods of Mathematics for building up their reasoning and analytical skills.

MISSION 2: To provide quality Mathematics course work which supports and enhances the capability and competence in assimilating, dissecting and distilling information for various applications.

# Training and Placement

## JIIT-Noida, JUIT-Waknaghat & JUET-Guna

Over the years, Jaypee Universities have built a strong network with leading companies for recruiting their engineering graduates.

The Training and Placement Cell at JIIT, Noida centrally handles campus placement of the graduating students of all campuses namely JIIT Noida, JUIT Waknaghat, JUET Guna and Jaypee University Anoopshahr. The cell provides complete support to the visiting companies at every stage of placement process. Arrangements for pre-placement talks, online/written tests, group discussions and interviews are made as per the requirement of the visiting companies.



PLACEMENT STATUS 2023 BATCH : JIIT, NOIDA					
Branch	Eligible Participating Students	Total No. of Offers	% of Total Offers	Absolute Offers	% of Absolute Offers
CSE	457	632	138.29%	456	99.78%
ECE	222	337	151.80%	220	99.10%
IT	49	61	124.49%	48	97.96%
Bio Tech	36	41	113.89%	28	77.78%
<b>Total</b>	<b>764</b>	<b>1071</b>	<b>140.18%</b>	<b>752</b>	<b>98.43%</b>
PLACEMENT STATUS 2023 BATCH : JUIT, SOLAN					
Branch	Eligible Participating Students	Total No. of Offers	% of Total Offers	Absolute Offers	% of Absolute Offers
CSE	217	366	168.66%	203	93.55%
ECE	37	49	132.43%	28	75.68%
IT	40	45	112.50%	34	85.00%
Bio Tech / Bio Info	24	25	104.17%	17	70.83%
Civil	18	8	44.44%	7	38.89%
<b>Total</b>	<b>336</b>	<b>493</b>	<b>146.73%</b>	<b>289</b>	<b>86.01%</b>
PLACEMENT STATUS 2023 BATCH : JUET, GUNA					
Branch	Eligible Participating Students	Total No. of Offers	% of Total Offers	Absolute Offers	% of Absolute Offers
CSE	273	449	164.47%	253	92.67%
ECE	18	13	72.22%	11	61.11%
Mechanical	12	16	133.33%	11	91.67%
Civil	5	8	160.00%	4	80.00%
Chemical	3	3	100.00%	2	66.67%
<b>Total</b>	<b>311</b>	<b>489</b>	<b>157.23%</b>	<b>281</b>	<b>90.35%</b>

# Recruiting Companies in 2023

S.No.	Company	Sector
1	KPMG	Consulting
2	Tower Research Capital	Consulting
3	Deloitte USI	Consulting
4	Delve Insight Business Research LLP	Consulting
5	ESQ Management Solutions	Consulting
6	Evalueserve	Consulting
7	EXL Technologies	Consulting
8	EY India	Consulting
9	GreyB Research	Consulting
10	Jasper Colin Research	Consulting
11	TheSMARTcube	Consulting
12	WatchGuard Technologies	Consulting
13	ZS Associates India	Consulting
14	Amazon	E-Commerce
15	Magicpin	E-Commerce
16	Makemytrip	E-Commerce
17	Anveya Living	E-Commerce
18	AppsForBharat	E-Commerce
19	CollegeDunia	E-Commerce
20	Fleetx	E-Commerce
21	HyperDart Technologies	E-Commerce
22	Wheelseye Technology India	E-Commerce
23	Zomato	E-Commerce
24	MagicEdtech	Education Technology
25	BYJUS	Education Technology
26	Convegenius	Education Technology
27	Hike Education	Education Technology

S.No.	Company	Sector
28	Jaro Education	Education Technology
29	Cadence	Electronics
30	Continental Automotive Components	Electronics
31	Jio Platforms Ltd	Electronics
32	JSW Group	Electronics
33	Biz2credit	Fintech
34	Future First	Fintech
35	American Express	Fintech
36	Ameriprise Financial	Fintech
37	Avalara Technologies	Fintech
38	AXA XL India	Fintech
39	Gridlines	Fintech
40	Newgen Software Technologies Limited	Fintech
41	SBI Card	Fintech
42	Octro	Gaming
43	Zyla Healthcare	Healthcare Technology
44	IDS Infotech	Healthcare Technology
45	Axtria	Healthcare Technology
46	Nestle India	Healthcare Technology
47	Winglobe Healthcare	Healthcare Technology
48	Accenture	IT
49	Accuknox	IT
50	Adani Digital Labs	IT

S.No.	Company	Sector
51	Adobe	IT
52	Aliens Group	IT
53	Atlan	IT
54	Atlassian	IT
55	Beaconstac	IT
56	Blog Vault	IT
57	Bosch Limited	IT
58	Buyhatke	IT
59	Capgemini	IT
60	Chalo India	IT
61	ChangeCX	IT
62	ChangEngine	IT
63	Cognizant	IT
64	Darwinbox	IT
65	Dassault Systems	IT
66	Data Insight	IT
67	EagleView	IT
68	FarziEngineer	IT
69	Fundwave	IT
70	Genpact	IT
71	Google India	IT
72	Grapecity	IT
73	Grappus	IT
74	HashedIn by Deloitte	IT
75	HCL Technologies	IT
76	Hyperverge	IT
77	IBM	IT

S.No.	Company	Sector
78	Infinia Solar	IT
79	Infosys	IT
80	Inframarket	IT
81	Intellipaat	IT
82	Intuit Inc	IT
83	Invent IP	IT
84	Josh Technology Group	IT
85	Keyence India	IT
86	Kratikal Tech	IT
87	Krishify	IT
88	LambdaTest	IT
89	LeadSquared	IT
90	Libsys Ltd	IT
91	Loconav	IT
92	Lowe's India	IT
93	LTIMindtree	IT
94	Lumenci	IT
95	Lumiq	IT
96	MAQ Software	IT
97	Microsoft	IT
98	Morgan Stanley	IT
99	MSL	IT
100	Mtree Software	IT
101	MyCaptain	IT
102	NewGen IT	IT
103	Nexdigm	IT
104	Nference	IT
105	Nurture.farm	IT
106	Optum	IT

S.No.	Company	Sector
107	Oracle Financial Software	IT
108	ORI Serve	IT
109	Pentair	IT
110	PhonePe	IT
111	Phronesis Partners	IT
112	PlaySimple Games	IT
113	Plotline	IT
114	PPL Work	IT
115	Procol	IT
116	Publicis Sapient	IT
117	Pure Storage	IT
118	Qikfox	IT
119	R Systems International	IT
120	RateGain Technologies	IT
121	Reliance Jio	IT
122	RNR Consulting	IT
123	RTDS	IT
124	RxLogix Corporation India	IT
125	S&P Global	IT
126	SAAS Labs	IT
127	SAP Labs	IT
128	SquadStack	IT
129	Supermind	IT
130	Tailnode	IT
131	TCS	IT
132	Testbook	IT
133	Thales Group	IT
134	Titan	IT
135	Trilogy Innovations	IT

S.No.	Company	Sector
136	Up Roar Learning	IT
137	Vehant Technologies	IT
138	Wobot.ai	IT
139	Workato	IT
140	Zopsmart Technologies	IT
141	Zycus	IT
142	Chaayos	Retail & IT
143	Fab Hotels	Retail & IT
144	Snackmagic-Vinsol	Retail & IT





## Students Club

JYC is a vibrant student body which provides avenues for co-curricular activities in the university through a variety of its constituent clubs. These Clubs include Literary, Cultural, Environment and Health, Technical, Photo & Videography, Dramatics and Sports. This student body is elected from within the students and provided support and mentorship through faculty members. Events such as Sports, Technical and Cultural Fests are organized in a competitive manner inviting other universities. Students of all years are encouraged to become members of various clubs. It provides a very strong forum for students to develop their organizing skills in event management, developing soft skills confidence and team spirit. Cultural and musical bonanzas, Annual Cultural Fest, Sports Fest, Technical Fests, Nukkad Nataks, Model United Nations and Youth Parliament are some of the activities conducted by the JYC.

### Clubs at IIIT

**Creativity and Innovation Cell in Electronics**

**It's Our Earth**

**Adwitya** – Services to specially-abled persons

**Radiance** – The Fashion Club

**Jhankaar** – The Dance Club

**KNUTH** – Programming Club

**Arkasm Society** – Theatre Club

**Graficas** – Graphics and Animation Club

**Ecoquence** – The Environment Club

**Expressions** – The painting Club

**Parola** – The Literary Club

**Page Turner Society**

**Microcontroller Based Systems and Robotics Club**

**Kalakriti** – The Rangoli Club

**Cresendo** –The Music Club

**Fortissimo** – The Music Hub

**Abivyakti** – Street Play

**Ebullience** – Fresher's Welcome Event

**Converge** – Annual Technical-Cultural-Sports

Optical Society of America (OSA), IIIT Chapter

### Clubs at IIIT

**Cultural and Dance Club**

**Sports Club**

**Literary and Debating Club**

**Theatre and Music Club**

**Environment, Ecology and Health Club**

**Technical Sciences, Movies and**

**Photography Club**

**Koshish Club**

### Clubs at IIIT

**Google Developer Club**

**Geeks for Geeks**

**BotNet Club**

**AR/VR/MR Club**

**RoSliNoT**

**UI/UX Club**

**Mozilla Phoenix Club**

**Bitwise Development Club**

**Multimedia Club**

**Publication Club**

**Mechanical Engineering Society**

**Civil Engineering Forum**

**IIIT Youth Club (JYC)**

# Service to the Society

## National Service Scheme (NSS) (JIIT)

JJIT believes in developing students' consciousness and well-being by giving back to society through social outreach and community service along with scholarly education. For this cause, it has set up National Service Scheme, popularly known as NSS, which is a permanent youth programme under the Ministry of Youth Affairs and Sports, Government of India and funded by Government of Tamil Nadu and Government of India in the ratio 5:7. Five NSS units of 100 students each have been sanctioned. Currently, there are approximately 500 NSS student volunteers actively engaged in social service.

**NSS-JIIT takes pride in three key initiatives. These three initiatives are:**

a) Education and Awareness Drives b) Say no to Plastic and c) Waste and Disaster Management. All activities, tasks, drives, and campaigns revolve around it. NSS JIIT organizes education camps, blood donation camps, food distribution camps, disaster donation drives, to name a few through NSS. JIIT conduct awareness campaigns, offer sustainable solutions for holistic development, conduct activities for environment, hygiene and cleanliness and educate individuals at every level. NSS JIIT promotes national missions such as Sarv Shiksha Abhiyan, Swachh Bharat, Fit India Movement, Digital India etc. It has associations with major NGOs of Delhi NCR such as Udayan Care, Sewa India Group, Robin Hood Army, Vegan Outreach, Rotary Club, Grace Care Home, Saikripa Foundation etc. Volunteers visit these NGOs and render their services.

## Unnat Bharat Abhiyan (UBA) (JIIT)

Jaypee Institute of Information Technology, Noida is an active member of Unnat Bharat Abhiyan, a flagship programme of Ministry of Human Resource Development (MHRD), Govt. of India. Institute has adopted five villages from Gautam Budh Nagar, Uttar Pradesh under this program.

Motivation by the vision of Gandhi ji of self-sufficient 'village republics', Govt. of India has set its vision of holistic development of villages. Under this vision, rural areas need to be developed with local resources (both material and manpower), eco-friendly technologies so that the basic need of food, clothing, shelter, sanitation, health care, energy, livelihood, education etc. are locally met. The main aim of Unnat Bharat Abhiyan is to enable faculty and students of the institution to work with the

people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth of adopted villages.

The primarily objective of JIIT is to develop linkage with selected rural clusters, to get involved in the planning process and to promote the requisite science and technology interventions to improvise and expedite the developmental efforts in these clusters.

In this regard, JIIT understood the needs of selected villages and exploring the possibilities of customizing existing technologies as per the local needs

## Unnat Bharat Abhiyan (UBA) (JUIT)

Unnat Bharat Abhiyan is a flagship program of MHRD (Govt. of India) and its main mission is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. Jaypee University of Information Technology (JUIT), Wagnaghat is an active participating institute for UBA. Five villages in vicinity of University campus of district Solan have been adopted for enhancement of their standards of living, better environment for education and living. A team of students and teachers organize various activities at villages for rural development. The main focus of these programs is to identify the issues related with day today activities in hilly villages and try to solve these problems with sustainable solutions. The UBA team promotes various government schemes in adopted villages. As a part of UBA team, students learn team skills, discipline, collaboration and social and cultural etiquettes. UBA team of JUIT organized various events in these villages including computer literacy programme, awareness rally against drug abuse, analysis of drinking water, participation in gram sabha, biogas plant awareness and plastic free campaign.

## Unnat Bharat Abhiyan (UBA) (JUET)

JUET, Guna is also actively involved in various activities like education, health, crafts, agriculture, medicine (traditional), handicrafts, rural cultural resources (ancient and traditional knowledge resources) and environment. JUET faculty and students are also involved in counseling and providing the necessary technical input to the villagers, especially youngsters, for the preservation and promotion of rural crafts, vermicomposting, counseling for sanitation and hygiene, rain water harvesting and to identify the needs of villagers and take their inputs on the social issues. Regular visits are being organized in these 5 villages (Achakalpur, Raghunathpura, Shripura, Bhadari, Sarsahel) adopted by university.



## National Cadet Corps (NCC) (JUIT)

The JUIT Waknaghat has introduced NCC Senior Wing for both girls and boys. For girls this was started w.e.f academic session 2018 with a capacity of 80 cadets. For boys it commenced w.e.f 2019 with a capacity of 80 cadets. Volunteer students can apply for NCC during their first year. The selection is carried out by H.P battalion NCC, Solan based on practical test and interviews at university campus. Participation by students in NCC enhances their personality and gives them an edge during placements and job interviews also.

## Fit India Campaign (JUIT/JUET)

Incidences of various life style diseases (e.g.diabetes, hypertension etc.) are increasing in India, even in the children. Small life style changes by including fitness in the daily routine could help in the prevention of these diseases and help people of India to live a healthy and prosper life. Keeping this in mind, The Prime Minister of India launched the Fit India Movement on 29th August 2019. He insisted that the people of India should adopt fitness in their lifestyle. The vision of Fit India Movement is that "All students and staff of higher education Institutions to have physical fitness, mental fitness, along with social, emotional and intellectual well being".

Jaypee University of Information Technology (JUIT), Solan, Himachal Pradesh and Jaypee University of Engineering and Technology, Guna (JUET) are active members of Fit India Movement. The JUIT and JUET have constituted Fit India Campaign clubs and prepared a schematic plan for various activities to be conducted as a part of this movement, as per instructions of the Ministry of Human Resource Development. The objectives/ mission of the movement are being achieved by organizing various activities that include the constitution of a fitness club, fitness campaign activities, devoting a daily/ regular fitness activity hours and various seminars/webinars on the related theme for the students and staff.

## Swachh Bharat Abhiyan (SBA) (JIIT/JUET)

Swachh Bharat Abhiyan has been launched by Ministry of Human Resource Development to meet the objectives of the movement 'Swachh Bharat Mission' which was launched on October 2nd, 2014. JIIT and JUET are also a part of this movement. The institutes participate in various activities suggested by MHRD i.e Swachh Bharat Summer Internship Program, Swachhata Hi Sewa Campaign etc. The students of JIIT Noida and JUET, Guna are involved in Information- education- communication activities, solid waste management related activities under Swachh Bharat Abhiyan.



# Students Support System

**Sports Facilities** – The sports facility comprise of modern gymnasiums, swimming pools (separate for boys and girls), squash courts, table tennis, pool tables, basket ball courts, volley ball courts badminton court and billiards tables.

**Medical Facilities** – A First Aid Centre at the campus provides medical care to the students round the clock. OPD consultation and treatment are provided during working hours. Facility of students' counselor is also available.

**Other Facilities** – On campus ATM, laundry services, Wifi enabled hostels, Annapurna, CCTVs at strategic locations for security, photocopier outlet, laundry, swimming pool, temple, guest house etc





# Jaiprakash Sewa Sansthan

The Group has always believed in “growth with a humane face” and to fulfill its obligations it has set up Jaiprakash Sewa Sansthan (JSS), a ‘not-for-profit’ trust which primarily serves the objectives of socio-economic development, reducing the pain and distress in society.

For over five decades now, Jaypee Group has supported the socio-economic development of the local environment in which it operates and has ensured that the economically and educationally challenged strata around the work surroundings are also benefited from the Group’s growth by providing education, medical and other facilities for local development.

The Group also undertakes Comprehensive Rural Development Programme (CRDP) which covers a wide range of projects such as free medical camps, health check-ups for village school children, literacy campaigns like Balwadis for young boys and girls, safe drinking water supply, creating huge water reservoirs in villages, self employment which includes tailoring classes for women and animal husbandry. Some other important activities undertaken include the renovation of old temples, schools and hospital buildings in the adjoining adopted villages.

JSS has translated its social responsibility in to reality by building schools and training institutes that cater to the needs of providing quality education to the rural masses. The Trust also helps in times of natural catastrophe to the affected communities in distress.



# The Jaypee Group

Transforming challenges into opportunities has been the hallmark of Jaypee Group ever since its inception over five decades ago.

The Group is a diversified infrastructure conglomerate with business interests in:

- Engineering & Construction
- Cement
- Power
- Real Estate
- Expressways
- Hospitality
- Healthcare
- Fertilizer
- Education (not-for-profit)

## Engineering & Construction

The Engineering and Construction wing of the Group is an acknowledged leader in the construction of multi-purpose river valley and hydropower projects.

## Cement

The cement division of the Group has a comprehensive and rich experience of over 3 decades in producing quality cement through its state-of-the-art cement plants.

## Real Estate

The real estate division of Jaypee Group has made a place in the hearts of many home seekers. Jaypee Greens, Greater Noida launched in the year 2000 was the first project of Jaypee Group which is a golf-centric real estate development. It houses 18-hole golf course and a 9-hole golf course designed by Greg Norman.

Jaypee Greens Wish Town at Noida is India's another finest Golf centric township. The project offers 18-hole golf course and a 9-hole golf course designed by Graham Cooke and Associates.



## Power

The Group has a diversified portfolio of power generation in hydro & thermal power sectors.

## Healthcare

Jaypee Hospital, at three locations, have been set up with the vision of promoting world-class healthcare amongst the masses and to provide quality and affordable medical care with commitment.

## Expressways

The Group has constructed 165 kms long, 6 lane access controlled concrete Yamuna Expressway from Noida to Agra, Zirakpur to Parwanoo section of Himalayan Expressway (total length 27.59 kms) of NH-5, the Eastern Peripheral Expressway, Package III and four-laning of Varanasi-Gorakhpur section of NH-29.

## Hospitality

The Group's hospitality business owns and operates 5 luxury properties with a total capacity of 867 rooms. Four 5 Star Hotels, two each in New Delhi and one each in Agra and Mussoorie, are located strategically and offer a delightful experience. Another 5 Star luxury hotel, a state-of-the-art Golf and Spa Resort, housing 90,000 sq. ft Spa in Delhi NCR.

## Fertilizer

Operating state-of-the-art Urea Manufacturing Plant in Kanpur with an installed capacity of 7.22 lacs MTPA.

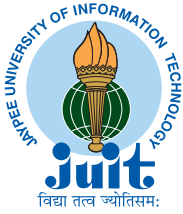


**2024 Admission Shall be based on :**

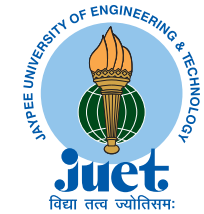
- (a) JEE-2024 All India Ranking**
- (b) 10+2 marks based merit**



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