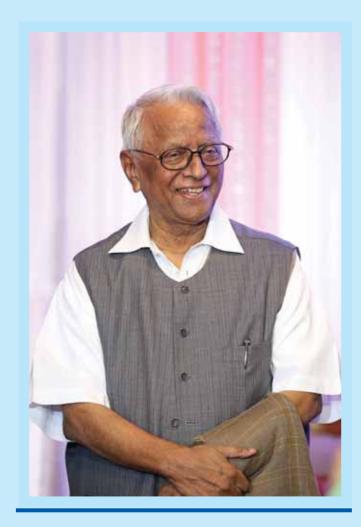




# ADMISSION BROCHURE 2025

Jaypee Higher Education System (JIIT, JUIT, JUET, JU-A)



**Jaiprakash Gaur**Founder Chancellor of JIIT and
Founder Chairman, Jaypee Group



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 upliftment 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**

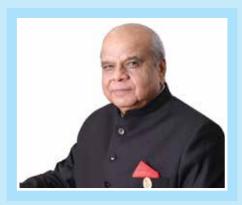
Chancellor – Jaypee Institute of Information Technology, Noida and Jaypee University, Anoopshahr

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.) Rajiv Saxena

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

Prof. Saxena, an alumnus of IIT-Roorkee, is a Professor of Electronics & Computer Engineering and was elevated to the position of VC in July 2018. He was associated with Jaypee Higher Education System since 2006. Former Director at JU, Anoopshahr and founder Head of The Department of ECE at Thapar Institute of Engineering and Technology, Patiala, Punjab.



## **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 Shweta Srivastava**

agencies like MoEF, DST, ICMR, Ministry of Ayush.

**Professor Pammi Gauba** 

**Affairs & Sponsored Projects)** 

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

Head, Dept. of Biotechnology, Dean (A&R)-I Dean (International

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

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)
- Computer Hardware and Networking (CH&N)

#### **Undergraduate (4 Years)**

#### **Bachelor of Technology (B Tech)**

- Biotechnology (BT)
- Computer Science and Engineering (CSE)
- Information Technology (IT)
- Artificial Intelligence and Machine Learning (AI&ML)
- Electronics and Communication Engineering (ECE)
- Electronics and Computer Engineering (ECM)
- Electronics Engineering (VLSI Design and Technology) (EE-VLSI)
- Electronics and Communication (Advanced Communication Technology (EC-ACT)

- Mathematics and Computing (M&C)
- Robotics & Artificial Intelligence (R&AI)
- Computer Science and Engineering (Cyber Security)
   CSE (CS)

## **Undergraduate** (4 Years with Hons/Reserch with option to exit after 3 years with UG degree)

- Bachelor of Business Administration (BBA)
- Bachelor of Science (Computer Science) BSc (CS)
- Bachelor of Computer Applications (BCA)
- Bachelor of Commerce (B Com)
- Bachelor of Arts (BA) in Journalism & Mass Communication (JMC)

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

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



#### **Post Graduate (2 Years)**

#### **Master of Technology (M Tech)**

- Biotechnology (BT)
- Computer Science & Engineering (CSE)
- VLSI Design
- Artificial Intelligence and Data Science (AI&DS)
- Robotics and Artificial Intelligence (R&AI)

#### **Master of Science (M.Sc)**

- Physics → Mathematics → Microbiology
- ▶ Economics Chemistry Bioinformatics
- Psychology Artificial Intelligence & Machine Learning (AI&ML) • Computer Science (CS)
- Data & Business Analytics (D&BA)

#### **Master of Computer Applications (MCA)**

**Master of Commerce (M Com)** 

**Master of Design (M Des)** 

Master of Arts (MA)

**Journalism and Mass Communication (JMC)** 

**Digital Business Management (DBM)** 

Master of Business Administration (MBA)

#### Specialization in -

- International Relations and Public Policy
- Education Management (EM) ◆ Healthcare and Hospital Management (HHM) ◆ Finance
- Marketing ◆ Human Resource ◆ Operations
- ◆ Information Technology ◆ Business Analytics

#### **Doctor of Philosophy (Ph.D)**

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

#### Minor Degree/Degree with Honours/ Specialization

University offers minor / honours / specialization in Artificial Intelligence & Machine Learning, Data Science / Data Analytics, VLSI Design and technology, 5G and Advanced Technology, Quantum Technologies 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 their 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 3500 GB RAM & amp; 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 JIIT in strong partnership with other JU's.

#### **RIDE** innovation Hub

RIDE (Research, Innovation, Development and Entrepreneurship) Innovation Hub has been set up at JIIT to provide a platform to students and faculty of JIIT 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 then 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 JIIT Noida are available to all students / Faculty / Research Scholars of JIIT-Noida, JUIT-Waknaghat, JUET-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.
- 19554 alumni including 364 Doctoral, 14771 B.Tech, 1691 M.Tech (including Dual/ Integrated Degree), 1790 MBAs, 138 M.Scs and 332 BBAs.
- Organized 54 International Conferences, over 400 invited talks and 160 workshops and seminars with 8000 delegates from India and abroad during last 10 years.
- Contributed 6394 Research Papers in International and National Journals/
   Conference, 61 Books and 498 Book Chapters, 52 Case studies.
- 20 Research Projects worth Rs. 6.09 Cr completed and 52 Research Projects worth Rs. 12.25 Cr currently running. Projects sanctioned from Government Agencies like DRDO, DST, AICTE, DBT, KFCL etc.
- Option of 6 week summer internship after third year & credit transfer of VIII Semester Studies at University of Florida at Gainsville for UG students.
- MOU for exchange program with Charles Sturt University, Australia, IOWA State University, USA, National Tsing Hua University, Taiwan and Yeungnam University, Gyeongsan, Republic of Korea.
- Credited with 74 Patents filed & published, 18 patent granted and 1 technology transfer.
- 121 Classrooms, 125 Laboratories, 2 Auditoriums, Administrative Offces, Outdoor and Indoor sports facilities, Dispensary, 3 Swimming pools, 11 hostels accommodating 1316 boys and 914 girls in double occupancy, Vice-Chancellor, Director, Faculty and Staff residences.
- 371 faculty members, 83% with Ph.D and 100% with PG Degrees.
- About 50 National and International awards for research, received by faculty and students of Institute.

- 379 Ph.D produced since 2008-09.
- 2024 pass-out B.Tech, M.Tech & Dual Degree students are placed in 252 companies with 107% offers and 94% absolute placements. MBA students are placed in 56 companies with 81% offers and 81% 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 JIIT and gave his Keynote talk on 21/12/23
- The highest salary package offered for the 2024 batch is INR 60 Lakhs & 70 Lakhs to two student by LinkedIn. 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 8.62 Lakhs and median salary package INR 6.50 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 JIIT 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 Swachch 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 JIIT along with the launch of two new B.Tech programs on VLSI and Advanced Communication Technology



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

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



#### **Professor Ashok Kumar Gupta**

Dean (Academics & Research) – 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 the current position of

Dean (Academics & Research). He has been listed amongst the top 2% scientists in Standford list of prominent scientists.



#### **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- theart multi-processor servers accessed by an array of multimedia desktops.

Thrice NAAC accredited, Biotechnology course NBA accredited, NIRF ranked, Jaypee University of Information Technology, Waknaghat, 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 Waknaghat, in District Solan of Himachal Pradesh, it covers a total built-up area of over 73,864.81 m2. 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)
- Computer Science and Engineering (CSE)
- Computer Science and Engineering with specialisation in AI-ML/AI-DS/Cyber Security/UI-UX Design/Full Stack Software Development
- Electronics & Communication Engineering (ECE)
- Electronics and Computer Science (ECS)
- Electronics Engineering (VLSI Design & Technology) (EEV)
- Information Technology (IT)
- Mathematics & Computing

#### **BCA & BBA Programs**

- Bachelor of Computer Applications with specialization in AI-ML / AI-DS
- 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)

#### Note:

- 1. In M.Sc.(Biotechnology)10 seats out of total 30 are DBT,GoI supported for GAT-B qualified students.
- 2. For Course Structures of above programs please refer our website: 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 BTech 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 BTech 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 particulars batch along with the additional 18/20 credit in the minor area as specified by the department concerned.

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

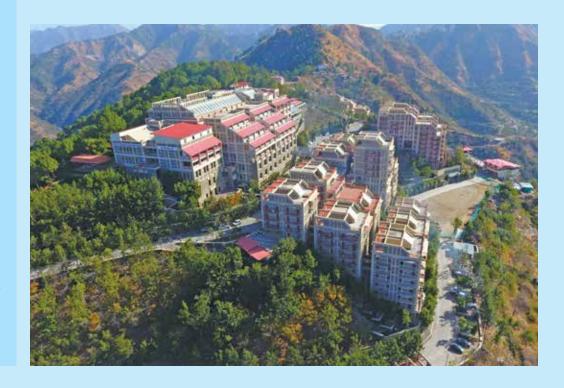
#### **Degree with Honours**

JUIT, Waknaghat 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 with A+ Grade.
- NBA accredited BTech Biotechnology Program.
- Ranked amongst Top Engineering Institutes under National Institutional Ranking Framework (NIRF) by MHRD, Gol for last eight consecutive years.
- ◆ Ranked in Band 801-1000 in Times Higher Education World University Rankings 2025.
- → JUIT Ranked in Band 251-300 in Interdisciplinary Science Rankings in Times Higher Education World University Rankings 2025.
- JUIT Ranked in Band 201-600 in ENGINEERING subject and 601-800 in COMPUTER SCIENCE subject by Times Higher Education World University Ranking 2024.
- Ranked in Band 601-620 in QS Asia University Rankings 2025.
- Ranked 179 in QS Southern Asia University Rankings 2025.
- Achieved Gold Accreditation Status from the Global Standardization & Accreditation Agency (GSAAA).
- Ranked 107 in India by SCIMAGO Institutions Rankings 2024.
- 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, UCLM Spain, 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 PhD from IITs / NIITs / 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 4065 Research Publications, 142 Books and 394 Book Chapters.
- Organized 34 International Conferences.
- Received 94 research grants from various Government Agencies and 45 Patents Granted and 52 Published.
- 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 BTech 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, Senior Member IEEE 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. He is an active researcher in the area of image processing and has written several books also.



**Dr. Sanjay Garg** 

Dean(Innovation & Research) Jaypee University of Engineering and Technology.

Prof. 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 on the campus started in the year 2003. 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
- ♦ Inculcation 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**

#### B.Tech. (4 years).

- Computer Science & Engineering
- Computer Science & Engineering (AI&ML)
- Computer Science and Engineering (Data Science)
- Electronics & Communication Engineering
- Electronics Engineering (VLSI Design & Technology)
- Mechanical Engineering
- Mechanical and Mechatronics Engineering (Addittive Manufacturing)
- Chemical Engineering
- Civil Engineering

#### Lateral Entry in BTech II year

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

#### BBA (4 Years with option to exit after 3 years)

#### Post Graduate (2 Years)

#### M.Tech.

- ◆ Chemical Engineering
   ◆ Computer Science & Engineering
- ♦ Electronics & Communication Engineering
  ♦ Mechanical Engineering
- Civil Engineering (Structural Engineering/ Environmental Engineering/ Construction Management)

#### M.Sc (2 Years)

♦ Mathematics ♦ Physics ♦ Chemistry

#### Diploma (3 years)

◆ Civil Engineering ◆ Mechanical Engineering

#### Ph.D

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

#### Specializations, Minor Specializations and Micro-Specializations

University offers opportunity to B. Tech. students for specialization in an area within their main branch and also minor specializations in other than their main branch. For specializations, students are required to earn additional 18 credits in the chosen area of specialization. Specialization should be from the same department and Minor specialization from other department.

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/Course/Specialization.php



#### Significant Achievements/Highlights -JUET

- NAAC accredited university with A+ grade
- Ranked in Times Higher Education (THE) ranking 2024 in the band of 501-600 in the category of Inter-discilpinary science ranking
- Faculty members with more than 14 years of average teaching and research experience.
- About 90% faculty members with Ph.D. degree from reputed institutions of the country like IIT, NIT, etc
- A base of more than 7000 alumni
- 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)
- Institution Innovation Council (IIC) in place 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
- Option available for B Tech students to complete 8th semester study at University of Florida and one semester at JIIT Noida through credit transfer program
- Credit transfer available for the MOOC courses from NPTEL and SWAYAM, MOE, GOI
- Partnership with Academic Bank of Credits
- ♦ 15 National/International Conferences, 34 National/International workshops, 23 Short Term Courses, around 3000 delegates attended, 190 invited talks delivered by experts from around the world and number of FDPs organized
- Published more than 1360 Journal Articles, 615 conference proceedings, 131
   Books and Book Chapters
- 43 Patents published
- Research Grants from various government agencies
- MOU with important institutions of the country like IIITDM Jabalpur, 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 Swachch 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 350 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 and incorporated under UP Act no. 12 of 2019. 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 & AI (c) EE-VLSI Desig & Technology
- B.Sc (a) Mathematics (b) Physics (C) Zoology, Botany & Chemistry
- B.Com → B.A → BBA → BCA → MBA → MCA
- Diploma in Electronics and Computer Engineering

#### **PhD**

- ➤ 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 "Shikhsha 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	JIIT-Noida (Sec. 62 & 128)	JUIT-Waknaghat, H.P.	JUET-Guna, M.P.	JU-ANOOPSHAHR, U.P.
Seats	1740	750		
B.Tech Disciplines offered (Seats)	CSE (780) ECE(240) IT(120) BT (60) ECM (120) EE(VLSI) (60) EC(ACT) (60) M&C (120) AI & ML (60) R & AI (60) CSE (CS) (60)	BT(30) BI(30) CE (30) CSE(540) IT(30) M&C(30) ECE/ECS(30) EEV(30)	CSE (480) CSE (AIML) (60) CSE (DS) (60) ECE (30) EE (VLSI design & Tech) (30) CE (30) CHE (30) ME (30) ME & Mech Engg (AM) (30)	CSE Robotics & AI EE-VLSI
Integrated M.Tech	CSE(30), ECE(30), BT (30)	-	-	
B.B.A	240	30	60	B.B.A
B.C.A	120	30	-	B.C.A
B.Sc	Computer Science (30)	-	-	Mathematics, Physics, Zoology-Botany- Chemistry
B.A	Journalism and mass Communication (JMC) (60)	-	-	B.A
B.Com	30	-	-	B.Com
Diploma	EE (Microelectronics) (30) Computer Hardware and Networking (CH & N) (30) Computer Science & Information Technology (30)	-	CE (30) ME (30)	Electronics & Computer Engineering





#### **UG Programs**

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

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.

At JIIT, Noida 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 thorough 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.

#### B. Tech. (Artificial Intelligence & Machine Learning) (JIIT)

The Bachelor of Technology in Artificial Intelligence and Machine Learning (AI&ML) is a cutting-edge undergraduate program designed to equip students with the knowledge and skills required to excel in the rapidly growing field of AI and ML. This program combines the fundamentals of computer science, mathematics, and engineering with advanced topics in AI and ML, enabling students to build intelligent systems that can learn, reason, and solve complex problems. Throughout the four-year program, students delve into core areas such as machine learning, deep learning, natural language processing, computer vision, reinforcement learning, and big data analytics. The curriculum emphasizes hands-on learning through practical labs, projects, and industry internships, ensuring students gain real-world experience in designing and deploying AI solutions. Interdisciplinary in nature, the program integrates ethical AI practices, optimization techniques, and applications of AI in fields like healthcare, finance, robotics, and autonomous systems. Graduates emerge as industry-ready professionals, adept at leveraging Al/ML to innovate and address global challenges. With a strong foundation in Al principles, problem-solving, and computational thinking, this program prepares students for a wide range of career opportunities in AI research, software development, data science, and entrepreneurship, or for advanced studies in AI/ML.

#### Computer Science and Engineering (Cyber Security) (JIIT)

The **B.Tech. - Computer Science and Engineering (Cyber Security)** is a four-year undergraduate program designed to equip students with the skills and knowledge necessary to protect digital systems, networks, and data from cyber threats. As cybercrime continues to rise globally, the demand for skilled cybersecurity professionals is at an all-time high. This program covers key areas such as cryptography, ethical hacking, network security, malware analysis, cloud security, and digital forensics, etc. Students gain hands-on experience through practical labs, real-

world simulations, and industry-oriented projects. The curriculum integrates advanced technologies like artificial intelligence (AI) and blockchain to enhance cybersecurity measures. In addition to technical expertise, students develop problem-solving skills and an understanding of legal and ethical considerations in cybersecurity. The program prepares graduates for roles such as cybersecurity analyst, ethical hacker, security consultant, and penetration tester and offers excellent career opportunities in government agencies, financial institutions, multinational corporations, and IT firms. Graduates can also pursue certifications like CEH (Certified Ethical Hacker) and CISSP (Certified Information Systems Security Professional) to further enhance their credentials. This program is ideal for those passionate about securing the digital world and combating cyber threats.

## **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 Biotechnology industry is expected to reach \$150 billions by 2025. 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 & amp; Genomics Technologies, Nanobiotechnology, Antimicrobial Resistance, Animal & Enterprise amp; Plant Cell Culture, Fermentation & Enterprise amp; Downstream Processing, Molecular Diagnostics, Disease & Enterprise amp; 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. The Civil Engineering department of JUIT is having MoU with NHAI and CBRI for exchange of knowledge, exposure visits and hands on training. The department is also involved in consultancy work.

#### **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 & amp; 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 Computer 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/JUET)

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 analysze 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)/ CSE (DS) (JUET)

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 specialiszed field within computer science dedicated to developing machines with the capability to perform tasks that would typically necessitate human intelligence.

## Computer Science and Engineering (Cyber Security) (JIIT/JUIT)

It is a four-year undergraduate program designed to equip students with the skills and knowledge necessary to protect digital systems, networks, and data from cyber threats. As cybercrime continues to rise globally, the demand for skilled cybersecurity professionals is at an all-time high. This program covers key areas such as cryptography, ethical hacking, network security, malware analysis, cloud security, and digital forensics, etc. Students gain hands-on experience through practical labs, realworld simulations, and industry-oriented projects. The curriculum integrates advanced technologies like artificial intelligence (AI) and blockchain to enhance cybersecurity measures. In addition to technical expertise, students develop problem-solving skills and an understanding of legal and ethical considerations in cybersecurity. The program prepares graduates for roles such as cybersecurity analyst, ethical hacker, security consultant, and penetration tester and offers excellent career opportunities in government agencies, financial institutions, multinational corporations, and IT firms. Graduates can also pursue certifications like CEH (Certified Ethical Hacker) and CISSP (Certified Information Systems Security Professional) to further enhance their credentials. This program is ideal for those passionate about securing the digital world and combating cyber threats.

#### **Robotics and Artificial Intelligence (R & AI) (JIIT)**

A B.Tech in Robotics and AI is an interdisciplinary engineering program that combines robotics, artificial intelligence, and automation to develop intelligent systems capable of performing complex tasks. The curriculum covers key areas such as machine learning, computer vision, embedded systems, control systems, and IoT, equipping students with the skills to design, build, and program autonomous robots. With

applications in industries like healthcare, manufacturing, space exploration, and autonomous vehicles, this degree prepares graduates for careers in cutting-edge technology fields, driving innovation in artificial intelligence and robotics to solve real-world challenges. Students pursuing a **B.Tech in Robotics and AI** gain hands-on experience through laboratory work, projects, and internships, allowing them to apply theoretical concepts to real-world applications. The program emphasizes programming languages like Python and C++, AI frameworks, and robotics hardware integration. Emerging technologies such as deep learning, reinforcement learning, and swarm intelligence are also explored to enhance autonomous decision-making in robots. With a growing demand for AI-driven automation across industries, graduates can pursue lucrative careers.

## 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 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, JUET & JUA)

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/ Mechanical and Mechatronics Engineering (Additive Manufacturing) (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, JUIT)**

The Bachelor of Technology program in Mathematics and Computing at JIT 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 & AI (JUA)**

The B.Tech in Robotics and Artificial Intelligence is a cutting-edge, interdisciplinary program designed to equip students with the knowledge and skills required to develop intelligent robotic systems. As automation and AI continue to revolutionize industries, this program offers a unique blend of mechanical engineering, electronics, computer science, and AI to prepare graduates for the future of technology.

Robotics focuses on the design, construction, operation, and application of robots—machines capable of carrying out tasks autonomously or semi-autonomously. These mechanical systems range from industrial robots assembling cars to service robots assisting in healthcare, agriculture, and logistics.

Artificial Intelligence, on the other hand, equips machines with the ability to mimic cognitive functions such as learning, problem-solving, and decision-making. Al algorithms analyze data, recognize patterns, and make predictions, enabling machines to perform tasks that typically require human intelligence.

Students will gain hands-on experience in robotics design, machine learning, deep learning, computer vision, autonomous systems, and human-robot interaction through practical labs, real-world projects, and industry collaborations. The curriculum focuses on problem-solving, innovation, and ethical AI development, ensuring that graduates are well-prepared to lead in emerging fields such as healthcare, manufacturing, space exploration, autonomous vehicles, and smart systems.

With state-of-the-art research facilities, expert faculty, and industry partnerships, this program fosters technical excellence, creativity, and leadership. Graduates will be ready for careers as AI engineers, robotics specialists, automation experts, and research scientists or to pursue higher studies in advanced robotics and artificial intelligence.

#### **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. Students also have an opportunity to pursue a Dual Degree [(2+2) in JIIT Bachelor of Science (Computer Science); and Charles Sturt University Bachelor of Information Technology] as per DUAL DEGREE AGREEMENT (INTERNATIONAL) signed between Charles Sturt University, Australia and Jaypee Institute of Information Technology, Noida

#### **B.B.A (Hons/Research) (JIIT in JBS/JUIT/JUET)**

The 4 years (as per NEP) 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 programme provides Exit option to the students (with the award of BBA degree) after the completion of three years.

The student who intend to earn honours degree may pursue for 4th year.

The 4 year BBA programme (Sem 5 and Sem 6) is designed with specialization in Finance, Marketing, HR, IT applications in Management and Data Analytics.

The 4th year (Sem 7 and sem 8) will provide two options to the students - Option - Honors with research/ Industry project. This will have dissertation / Industry Project as an integral part in Semester 8 along with discipline specific electives.

Successful graduates of this course can opt for a range of jobs from sectors like Finance, Marketing, Sales Management, HR, Data Analytics

Specialisations offered:

- Human Resource Management Marketing Finance Business Analytics
- Entrepreneurship

#### **B.Com (Hons/Research) (JIIT in JBS)**

Bachelor of Commerce (Hons/Research) an undergraduate 4 years course offers a mix of commerce related subjects such as Accounting, Management, Finance Marketing, Taxation, law, Research and Business Analytics to enable students to acquire knowledge, skills and abilities to analyse and synthesize the contemporary realities pertaining to the business. The programme aims to nurture the students in intellectual, personal, interpersonal and social skills with a focus on Holistic Education and development to make informed and ethical decisions and equips graduates with the skills required to become leaders and lead management positions. This programme brings out reflective and scientific thinking in the students which makes them inquisitive and curious to get deep insights of the business world and tackle the complex situations with much knowledge and wisdom. Students exiting after 3 years will be awarded B.Com degree

#### **Bachelor of Computer Applications (JIIT)**

The Department of Computer Applications (CA) offers a comprehensive three/four-year BCA program designed to meet the growing demands of the technology-driven world. Students can specialize in cutting-edge fields like Artificial Intelligence & Machine Learning (AI & ML), Cybersecurity, and Data Analytics, ensuring they stay ahead in the ever-evolving tech landscape. The BCA curriculum is thoughtfully designed to align with industry standards and best practices. It includes core courses, elective subjects, and a dissertation/project component, offering a balance of foundational knowledge and hands-on experience. This program focuses on developing expertise in computer applications and software development, equipping graduates with both theoretical understanding and practical skills in key areas, such as:

- Software Development
- System and Network Administration
- Database Management
- Cybersecurity
- Cloud Computing
- Data Analysis and Machine Learning
- Web Development
- · User Interface Design

Students are immersed in real-world scenarios through application development, collaborative software projects, and hands-on training. This practical approach fosters innovation and problem-solving skills, preparing graduates to excel in dynamic work environments. As industries increasingly rely on technology, there is a high demand for skilled IT professionals. BCA graduates are well-positioned to thrive in diverse roles such as:

- Software Developer
- · Cybersecurity Specialist
- Data Analyst
- System Administrator
- · Cloud Computing Engineer
- · Web Developer
- UI/UX Designer

Graduates with strong technical skills and relevant experience often secure competitive compensation packages.

For those aspiring to advance their education, the BCA program lays a solid foundation for postgraduate studies such as:

- Master of Computer Applications (MCA)
- Master of Science (MS) in Computer Science

These programs enable students to explore advanced research areas and contribute to academic or industrial innovation. Additionally, entrepreneurial graduates can leverage their knowledge to start IT consulting firms or software development businesses.

With its focus on industry-relevant skills and real-world applications, the BCA program empowers students to succeed in the fast-paced tech industry. Whether you aim to become an IT professional, a researcher, or an entrepreneur, this program is your gateway to an exciting and rewarding career in technology.

#### **Bachelor of Computer Applications (AI-ML, AI-DS) (JUIT)**

The Bachelor of Computer Applications (BCA) program is a comprehensive threeyear undergraduate degree aimed at developing a robust understanding of computer science principles and their real-world applications. This program is meticulously structured to cater to the growing demand for skilled IT professionals in various industries. It covers a broad spectrum of subjects, including programming languages (C, C++, Java, Python), database management systems (DBMS), Web development, computer networks, software engineering, operating systems, and mobile application development. Alongside technical skills, the curriculum emphasizes problem-solving, analytical thinking, and project management to prepare students for dynamic and complex IT environments. The BCA program integrates theoretical learning with practical training through hands-on projects, internships, and lab sessions, ensuring students gain industry-relevant experience. Emerging technologies like artificial intelligence, machine learning, cloud computing, cybersecurity, and data science are often included to keep pace with technological advancements. Additionally, students receive training in soft skills, including communication and teamwork, to excel in multidisciplinary teams. Graduates of the BCA program are equipped to pursue diverse career opportunities in roles such as software developers, system analysts, network administrators, web designers, database managers, and IT consultants. The program also lays a strong foundation for advanced studies like Master of Computer Applications (MCA), MBA in IT, or specialized certifications, fostering academic and professional growth. With its holistic approach, the BCA program is an ideal choice for aspiring IT professionals aiming to excel in the rapidly evolving technology sector.

#### **BA in Journalism and Mass Communication**

The **BA** in **Journalism and Mass Communication (JMC) (JIIT)** is a three-year undergraduate program that offers a broad foundation in media, journalism, and communication. It introduces students to the basics of journalism, digital media, advertising, public relations, and media ethics, blending theoretical knowledge with practical skills. Students benefit from hands-on experience through internships, media labs, and live projects, as well as mentorship from experienced faculty members. This program prepares graduates for entry-level roles in journalism, content creation, social media management, public relations, and advertising, or further specialization through postgraduate studies.

#### **Diploma Programs**

#### **Computer Science and Information Technology (JIIT)**

The Diploma in (Computer Science and Information Technology) programme offered by the Department of CSE & IT 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. 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-theart labs of JIIT, Noida.

#### Diploma in Computer Hardware and Networking (CH & N)

Diploma in Computer Hardware and Networking (CH& N) offered by the Department of CSE IT at the Jaypee Institute of Information Technology, Noida is a specially designed Programme for those who have passed class 10th examination & wants to pursue career in the Computer Hardware and Networking area. A three-year technical diploma program in Computer Hardware and Networking offers students a thorough understanding of the fundamental ideas and procedures in computer hardware and networking. The programme aims to fill the existing void of skilled workforce who wants to start their career at an early stage. Diploma in Computer Hardware and Networking program have a wide range of career opportunities in industries that rely on IT infrastructure and networking.

#### **Electronics Engineeing – 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.

#### **Diploma in Mechanical Engineering (JUET)**

This is a three-year program that equips students with the fundamental knowledge and skills required to succeed in the field of Mechanical Engineering. The program covers a broad range of topics, including mechanics, thermodynamics, design, materials science, and manufacturing processes. Students learn to design, develop, and maintain mechanical systems, machines, and tools, preparing them for careers in industries such as automotive, aerospace, design, thermal and manufacturing. Upon completion of the diploma program, graduates can pursue entry-level positions or further their education through a Bachelor's degree program.

#### **Diploma in Civil Engineering (JUET)**

This program comprising of basic sciences and engineering having focused on fundamentals, discipline level courses and ample electives. Internships have been embedded to make the student understand the industry requirements, have hands-on experience and take-up project work relevant to industry in their final year. This course imparts features to develop a problem-solving approach to face the field challenges. Curriculum will help to enhance employability and also enable youngsters to become job creators considering the outcome based learning. Upon completion of the diploma program, graduates can pursue entry-level positions or further their education through a Bachelor's degree program.

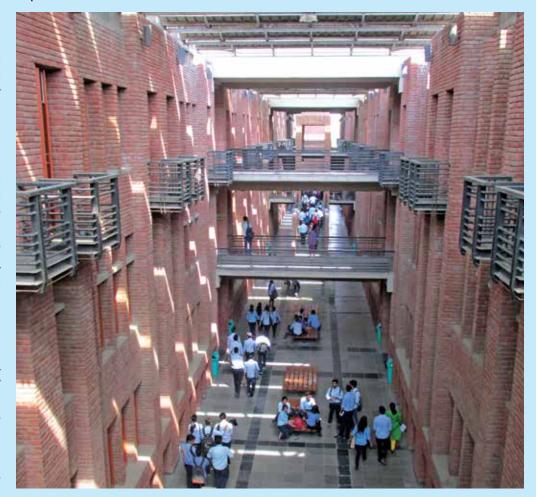
#### **Diploma in Electronics and Computer Engineering (JUA)**

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
M.Tech.	<ul> <li>Biotechnology</li> <li>Computer Science &amp; Engineering</li> <li>VLSI Design</li> <li>Artificial Intelligence and Data Science (Al&amp;DS)</li> <li>Robotics and Artificial Intelligence (R&amp;AI)</li> </ul>	<ul> <li>Biotechnology</li> <li>Computer Science &amp; Engineering (CSE)</li> <li>CSE with specialization in         <ul> <li>Information Security</li> <li>Data Science</li> </ul> </li> <li>Electronics and Communication Engineering (ECE)</li> <li>ECE with specialization in         <ul> <li>Internet of Things(IoT)</li> </ul> </li> <li>Civil Engineering with specialization in         <ul> <li>Construction Management</li> <li>Environment Engineering</li> <li>Structural Engineering</li> </ul> </li> </ul>	<ul> <li>Chemical Engineering</li> <li>Computer Science &amp; Engineering</li> <li>Electronics &amp; Communication         Engineering</li> <li>Mechanical Engineering</li> <li>Civil Engineering (Structural         (Manufacturing Technology)         Engineering/ Environmental         Engineering/ Construction         Management)</li> </ul>	X
Integrated M.Tech	<ul><li>Computer Science &amp; Engineering</li><li>Electronics &amp; Communication Engineering</li><li>Biotechnology</li></ul>	X	X	X
M.C.A	M.C.A	X	X	M.C.A
M.Sc.	<ul> <li>Mathematics</li> <li>Physics</li> <li>Microbiology</li> <li>Artificial Intelligence &amp; Machine Learning (Al&amp;ML)</li> <li>Computer Science (CS)</li> <li>Data &amp; Business Analytics (D&amp;BA)</li> <li>Economics</li> <li>Chemistry</li> <li>Bioinformatics</li> <li>Psychology</li> </ul>	Microbiology     Biotechnology	<ul><li>Chemistry</li><li>Mathematics</li><li>Physics</li></ul>	X
M.Des	• M.Des	X	X	X
M.B.A	<ul> <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> <li>International Relations &amp; Public Policy (IR&amp;PP)</li> </ul>	X	X	M.B.A
M.Com	• M.Com	X	Х	Х
M.A	Journalism and Mass Communication (JMC)     Digital Business Management (DBM)	X	X	X

#### **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.

In line with NEP 2020, Student enrolled in 2 years M. Tech. programmes is allowed with a possible exit for the award of PG Diploma in case of exigency. The exit with PG Diploma will be considered only after 1+ year.

## 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.

At JIIT, Noida, M.Tech. (CSE) is designed in such a way that student can design their own degree during this programme. 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, as well as, may leave after one year by getting a certificate & can join back within 5 year to resume the progress of his degree programme.

#### M. Tech. (Artificial Intelligence & Data Science) (JIIT)

M. Tech. (AI & DS) is a specialized two-year postgraduate programme offered by the Department of CSE & IT, that integrates the core concepts of artificial intelligence (AI) & data science (DS). This programme is designed to equip students with the skills and expertise to develop AI-driven solutions using large-scale data, while also addressing the theoretical foundations and practical applications of both fields. Students will learn to analyze complex datasets, build intelligent systems, and deploy machine learning and deep learning models across various domains such as healthcare, finance, business analytics, and more. First Year is devoted to courses related to AI and data science and allied 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.

Students who have completed B.Tech./BE in any discipline / MCA / MSc. (Maths, Operation Research, Statistics, Physics, etc) may apply for this M.Tech Programme.

#### 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.

#### 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)

MTech in Civil Engineering (Structural Engineering) is an integral part of Engineering stream since 2012. Under this course, study is focused on; scientific principles to design and build various structures such as multi-storey buildings, bridges, tunnels, dams etc. and other infrastructure required to conduct the operations effectively. It is specialized field of engineering giving emphasis on a particular area of applied mathematics. Today primary, secondary and tertiary construction sectors are heavily dependent on structural engineering. Students after BE / BTech (Civil Engineering) can take an entry to study this course. The quality and standards of technical courses

taught are determined by the concerned regulatory bodies from time to time, with an emphasis to incorporate latest design and analysis software such as STAAD pro, Abaqus, Ansys, SAP, Revit, ETABS etc. Students who enrich themselves to have a plethora of opportunities to work in structural engineering sectors with attractive package will definitely find this course of interest.

## 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 in dependent 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 & JUA)**

The Department of Computer Applications (CA) offers a comprehensive two-year MCA program, alongside its undergraduate and Ph.D. offerings. The MCA curriculum is meticulously designed to meet industry standards and align with best practices, combining core courses, elective subjects, and a dissertation/project component. This advanced program equips graduates with a robust foundation in both theoretical concepts and practical applications, empowering them to create innovative software solutions that address societal and industrial challenges.

#### **Key Highlights of the MCA Program:**

- Strong emphasis on software development and problem-solving skills.
- Development of essential soft skills, including oral and written communication, team collaboration, ethical decision-making, leadership, and project management.
- Hands-on exposure to real-world projects and case studies to foster practical expertise.

The MCA program prepares graduates to excel in a wide array of professional roles, such as:

- Software Architect
- Software Developer
- System Analyst
- Database Administrator
- Data Scientist
- Project Manager

Graduates can also venture into advanced research by enrolling in Ph.D. programs, collaborating with leading research institutions, or contributing to R&D organizations. Those with a passion for teaching can pursue rewarding careers in academia as educators or researchers. For those with entrepreneurial ambitions, the program offers the knowledge and confidence to start their own IT-related businesses or develop innovative technology ventures. The MCA program offers a transformative journey, combining technical rigor with personal and professional skill development. Whether your goal is to become a tech leader, a researcher, or an entrepreneur, this program equips you with the tools to thrive in a competitive, technology-driven world.

#### 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 & 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)

The course curriculum of M. Sc. Microbiology is designed with an aim to provide knowledge and skills in the field of Microbiology catering to Medicine, Pharmacy, Agriculture, Food and Dairy Industry, Environmental and Nanotechnology, IPR, etc., emphasizing on the latest advances in the field. An optimum blend of theory, labs and dissertation/hands on project work would open diverse career opportunities in Hospitals, Diagnostics, Pharma and Biopharma R&D's, Clinical laboratories, Food Industry, Food Safety and Quality Control as well as in core biotechnology industries.

#### M.Sc. in Bioinformatics (JIIT)

The course curriculum of M. Sc. Bioinformatics is designed to equip students with a blend of biology, computer science, and data analysis skills, making it a highly interdisciplinary. The course trains students to handle and interpret vast biological datasets, enabling advancements in areas like genomics, drug discovery, and personalized medicine. With bioinformatics playing a critical role in emerging fields such as synthetic biology and systems biology, graduates are prepared to contribute to cutting-edge research and innovation. An optimum blend of theory, labs and dissertation/hands on project work would open diverse career opportunities in academia, biotechnology, pharmaceuticals, and healthcare, leveraging computational tools to solve biological problems. This versatility ensures graduates are well-positioned for impactful careers in both industry and research.

#### **Master in Design (JIIT)**

The Master of Design (M. Des) program at Jaypee Institute of Information Technology (JIIT) Noida, is an advanced, interdisciplinary postgraduate program focused on fostering innovation, creativity, and problem-solving in digital design. Housed within the Mechanical Engineering and Design Department, this program seamlessly integrates technology, human-centered design, and business acumen to equip graduates with the skills needed to address complex challenges across industries, research, and education.

With a strong emphasis on digital design, product innovation, UI/UX design, and emerging technologies, the program prepares students for careers in user experience (UX) design, digital product development, strategic design, and AI-driven innovation.

The Master of Design (M. Des) program is a gateway to innovation, creativity, and critical thinking in design. Meticulously crafted for aspiring designers, it empowers

them to push creative boundaries, embrace cutting-edge methodologies, and make meaningful contributions to the evolving design landscape. Through a dynamic blend of theoretical knowledge, hands-on studio practice, and industry exposure, the program equips students to tackle complex design challenges across diverse domains.

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)

M. Sc. Economics is Two-Year program offered by Department of Humanities and Social Sciences. This program equips the students with necessary analytical and quantitative skills and knowledge for demanding careers in the field of economics. The program 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 analyze and forecast various processes associated with economics.

The M.Sc. Economics program offers a 6-8 week industry-aligned internship, enabling students to foster a deeper understanding of market dynamics and industry-relevant skills while bridging the gap between academic concepts and professional requirements. Additionally, the program includes a comprehensive dissertation component, where students conduct in-depth research on contemporary economic issues and other interdisciplinary domains. The students also have the opportunity to pursue certificate courses in Data Analytics and FinTech during the program.

This is an advanced course in economics and its applications, with special emphasis on quantitative methods. Upon completion of the program, students will be able to pursue an academic career in economics or take up responsible positions in various private and public sector organizations. The program provides an edge for students aiming to build a career in Analytics and Credit Scoring, 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 (JIIT & 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.

#### M.Sc in Psychology (JIIT)

M. Sc. Psychology is two-year full time program offered by Department of Humanities and Social Sciences. The program offers excellent learning opportunities to students and paves the way for a profound understanding of the mind and behavior. It focuses on a deep understanding of mental processes, motivations, emotions, conflict resolution, crisis management, group thinking, and the nature of the mind. It is designed to provide a well-rounded education that prepares students for all aspects of both personal and professional world.

The course aligns with industry requirements, ensuring practical exposure. It includes a 6 to 8-week summer internship, followed by a Project Report and Viva-Voce examination. Hence, the course structure ensures that students get hands-on experience in managing real-world mental health scenarios. It is an interdisciplinary program, and the courses cover domains such as counselling, child and adolescent development, statistics, cognitive neuroscience, and HR management.

The Dissertation/Project work aims to involve the application of knowledge in exploring, critically analyzing, and solving issues related to real-world scenarios.

# Master of Business Administration (MBA)

#### MBA at Jaypee Business School (JIIT)

MASTER OF BUSINESS ADMINISTRATION (MBA) The MBA curriculum at Jaypee Business School (JBS) is designed to foster successful careers in the business world and nurture entrepreneurial spirit.

#### The program offers:

- A cross-functional core curriculum covering Marketing, Finance, Economics, HRM, and more
- Specializations in major and minor areas to suit individual interests and aptitudes like Marketing, Finance, HR, Operations, Information Technology and Business Analytics, Hospital and Healthcare Management, International Business, Education Management, Digital Marketing, and Fintech.
- Practical experience through mandatory social internship (4 weeks) and corporate internship (8 weeks)
- Integration of emerging technologies (IoT, AI, Data Analytics) into core courses
- Soft skills development programs (Employability Skills, Business Communication) to enhance leadership and communication abilities
- Regular curriculum updates to align with industry trends and demands.

JBS's holistic approach equips students to:

- Think logically and work effectively in diverse teams
- Integrate knowledge across functional areas
- Develop socially sensitive management practices
- Stay adaptable in a rapidly changing business landscape.

This comprehensive curriculum prepares JBS graduates for successful and responsible leadership roles in the corporate world.

## MBA Specialization in Hospital and Healthcare Management

The emerging requirement of the Healthcare sector during the pandemic showed the gaps in managing patients and support services. This course is designed and developed in association with leading Hospitals to prepare management graduates / healthcare professionals to manage one of the five pillars to human existence.

The two-year specialized program provides an overview of the hospital eco-system and facilitates administration and management of the healthcare system.

The objectives of the program are understand the health management challenges and discuss the frameworks for finding an effective solution. deliver insights into the health care institutions' governance and organization structure. develop in students/ professionals understanding about the functioning of various health care service providers and significance of social and preventive health. develop an understanding of various managerial aspects like organizational behaviour, health communication, human resource management, finance, operation, analytics and research in the healthcare sector. encourage innovation and entrepreneurship in the healthcare sector.

#### **MBA Specialization in Education Management**

The growing needs and challenges of the education sector with implementation of NEP 2020 has resulted in the shift from conventional knowledge transfer to skill development among students. The transformation in the teaching-learning process requires resources as well as ensuring quality of education. The two-year full-time program in Education Management is designed to prepare management graduates with the knowledge and skills required to manage educational institutions. It is also beneficial to experienced teachers in academic roles to take on leadership roles in the institutions.

The objectives of the program are to impart experiential learning to teachers and professionals to take up leadership roles in the Education Sector. acquaint them with all functional areas and contemporary teaching practices for effective management of an educational institute.

## MBA Specialization in International Relations and Public Policy.

An MBA with specialization in International Relations and Public Policy is a unique interdisciplinary program that combines business management with global affairs, diplomacy, and policy-making. It is designed for professionals who aim to work at the intersection of business, government, and international organizations. This degree provides a strong foundation in global economics, trade policies, political strategy, and public governance, making it an ideal choice for those interested in shaping public policies and driving international business strategies. With globalization creating a more interconnected world, businesses and governments increasingly require

professionals who understand both corporate objectives and geopolitical factors. This program equips students with leadership skills and policy expertise to navigate complex international challenges, such as trade negotiations, economic diplomacy, sustainable development, and conflict resolution.

# **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.

# Master of Commerce (M Com) (JIIT at JBS)

Master of Commerce (M.Com.) programme aims to provide students with sound knowledge of accounting, management and business practices. The two- year programme is divided in to 4 Semesters. Students will be imparted an in-depth study of core commerce subjects such as Business Environment & Managerial Economics, Tax Planning & Management, Research Methodology, Advanced Financial Accounting and Corporate Governance & Business. Project preparation forms an integral part of the curriculum to enable students to get a detailed understanding on the subjects and thereby prepare them for future endeavours. Focus will be on enhancing analytical and decision – making skills to help the students to sustain and succeed in the everchanging corporate world.

# M.A. (Digital Business Management) (JIIT)

The M.A. in Digital Business Management is designed to equip professionals with the skills to leverage digital technologies and data-driven decision-making in the business world. This program offers an in-depth understanding of how digitalization impacts business operations through technology and data. It prepares graduates to lead digital transformation efforts and opens up a wide range of career opportunities, including roles such as Digital Transformation Specialist, Data Scientist, Consultant, Digital Marketing Manager, E-Business Consultant, E-Commerce Manager, and Digital Business Manager.

# **MA in Journalism and Mass Communication (JIIT)**

The MA in Journalism and Mass Communication (JMC) is a two-year postgraduate program that provides focused and specialized training in media, journalism, and communication. It emphasizes in-depth knowledge of media platforms, including print, broadcast, and digital, and hones advanced skills in media law, public relations, and digital journalism. This program is designed for students seeking expertise and leadership roles in the industry, with hands-on training through internships, live projects, and access to state-of-the-art facilities. The course is taught by experienced faculty and supported by dedicated career services, ensuring strong industry connections and high employability.



# **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- Waknaghat	JUET-Guna
Electronics & Communication Engineering	Speech Processing, Signal Processing, Machine Learning, Image and Video Processing, Filters, Optical and Wireless Communications, Wireless Sensor Networks, CMOS Design, Microelectronics, Internet of Things, VLSI Design, Embedded Systems, RF and Microwaves.	Internet of Things (IoT), Arial 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.
Computer Science & Engineering	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, Machine learning applications, Natural language processing.
Biotechnology & Bioinformatics	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- Waknaghat	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, TiO2 and ZnO2 Thin Films, Chalcogenide Semiconducting Thin Films, II-VI & IV-VI Quantum Dots	Solid State Ionics, Ferroelectric Materials, Nanomaterials and Thin Films; Magnetic and Multiferroic materials; Energy Storage Devices; Materials for Spintronic Devices, Computational Condensed Matter Physics, ReRAMbasedNeuromorphic devices, Nuclear Instrumentation, Nonlinear 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, Reliability Theory.
Humanities and Social Science	Economics , Sociology and Gender Studies, Political Science, Psychology, Finance, Accounting, FinTech ,Banking and Insurance, English, Linguistic Studies, Communication Skills, Marketing Management, Human Resource Management, Organizational Behaviour, Media Studies , Social work and other related domains of Humanities and Social Sciences.	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.
Mechanical Engineering	Renewable Energy Systems, Thermal Engineering, Advanced Manufacturing, Welding Technology, Mechatronics and Advanced Robotics, Computer Aided Design and Manufacturing, Numerical Computation and Modelling, Mechanical System Design, Product Design and Development, Material Science		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	Nanomaterials, Polymer Chemistry, Environmental Science, Natural Products, Heterogenous Catalysis, Computational Chemistry		Novel Surfactants, Oleo Chemicals, Polymer Chemistry, Environmental Science, Natural Products, Nano-bio Interacial Chemistry, Plasmonic nanomaterials and Material Chemistry.
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 90,710 books with more than 29,511 titles and approximately 3,58,000 E-Resources (National and International). LRC has to subscribe more than 15,890 e-Books. JIIT has two libraries for the students and faculty. Central Library: Located at Sector 62 Campus, having 25,231 title and 70,673 volumes. Departmental Library at Sector 128: having 4,280 titles and 20,037 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.

•	Book Titles	29,511
•	Book Volumes:	90,710
•	Print Journals:	74
•	e-Journals:	8589+
•	e-books	15890+
•	Other Online Resources:	3,50,000+
•	National Digital Library Contents:	NDL Access



# **Learning Resource Centre (JUIT)**

The Learning Resource Centre (LRC) at JUIT Waknaghat is the backbone of academic and research activities, supporting the teaching, learning and research pursuits 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. It also provides a substantial collection of books on competitive examinations and general reading. The LRC adopts an open shelf system that allows users the freedom to visit, browse, read and explore any document available on the shelves and in electronic format.

The LRC subscribes to a variety of scholarly databases such as Science Direct (Elsevier), IEEE, Springer, Nature Journal, ProQuest, SIAM eBooks and provides access to NPTEL and NDL resources. Beyond e-resources, the LRC subscribes to 73 print journals of repute and a range of local, regional and national newspapers in Hindi and English, offering an important service to keep users informed and up-to-date. The LRC is fully automated with the use of KOHA Library Management Software and RFID technology. The Web-OPAC feature of the software provides seamless

access to bibliographic details of library holdings to the users form anywhere, over the Internet, 24/7. The LRC holds memberships with prominent networks such as DELNET, NDLI, and also with INFLIBNET-UGC for contributing to the Shodhganga repository of UGC. Additionally, the LRC has implemented INFED, a remote access facility developed by INFLIBNET-UGC, further enhancing resource access for users. The JUIT publication database, maintained by the LRC, highlights the research output of the University.

A key feature of the LRC is its Institutional Repository (Digital Library), which hosts a variety of scholarly materials, including Project Reports, Theses, Newsletters, Annual Reports & previous year question papers, etc. The LRC services focus on users to keep them abreast of latest happenings in their respective areas of learning, while also procuring and offering high quality information resources. The library regularly organizes book exhibitions and user awareness programmes to support the academic and research needs of the University community.

Book Titles:	22,251
Book Volumes:	43,461
Print Periodicals:	73
E-Journals:	6,654
Other online resources:     Conference Proceedings News     Letters / Reports etc	5,539
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 Vishwesyarya Bhawan, 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. 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 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 MoE, Govt. of India. Subscriptions of 5000+ e-magazines and periodicals are available through Magzter. It has an Institutional repository (Digital Library) which is hosting project reports, Thesis, Newsletters & Annual Report 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. LRC collections are being updated periodically.

Book Titles:	9139
Book Volumes:	37755
Printed Journals:	50
e-Journals:	19842
Other online resources:	582429
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.jaypeeu.ac.in/.

Book Titles	1803
Book Volumes	11601
Print Journals	44
Print Magazines	16



# **Centres for Excellence**

# JIIT, Noida

# **Centre for Technology 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.

#### Al 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 Centre 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, Waknaghat

# 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. A National Workshop on Bioinformatics and Biomedical Image Analysis (NBBIA) was organized in 2019 as the first workshop of the centre. The centre also conducted an International Webinar series (IWS) where IWS Season-1 was organized during July 2020 to January 2021 and IWS Season-2 was organized during August 2021 to December 2021. Through these activities, training is imparted on the recent developments in Genomics, Proteomics, Structural Bioinformatics, NGS Data Analysis, System Biology, Biomedical Image and Signal Processing, Machine Learning, Artificial Intelligence, Deep Learning modules and their applications in Health Care and Medical Sciences. The centre also conducted a DST and DBT sponsored workshop on Statical Techniques on Biological and Medical Sciences (STMBS) on June 17-23, 2022 and its 4th edition during June 2024. STBMS is a flagship event of the CEHTI and of JUIT as well. Multiple BTech, MSc, MTech and PhD Projects allocated to the students are aligned with the overall objectives of CEHTI. Several Research Articles and Book Chapters have been published with CEHTI affiliations since its inception. CEHTI has an extensive International Board which includes Industry Experts as well. It is anticipated that CEHTI will provide insights to faculty and students on Biological, Bioinformatics and Health Care related recent developments.

## **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 of Himachal Pradesh and, organizations out of state. 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 Centre organized international conference in 2021 and workshops and training programs in 2022 and 2023. An international conference was also organized on 8th to 10th October, 2024 on interfaces of Chemistry, Biology and Material Sciences towards health and environment. The conference was funded by DST-SRB. Experts from India, USA, Singapore, UK delivered their invited lectures.

# **Centre for 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 five 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-performanceconcrete, application of civil engineering software for research scholars,

academicians, industry personnel's and government officials. The centre also conducts training programs for Engineers and supervisors in collaboration with District Disaster Management Authority (DDMA) Shimla and Solan.

# 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, Waknaghat 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, Waknaghat, 1 faculty member from JIIT, 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 unmeet 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.

Al/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.

# **Centre for Industrial Research and Development**

The Centre for Industrial Research and Development (CIRD) at Jaypee University of Engineering and Technology is committed to advancing industrial innovation, optimizing manufacturing processes, and fostering technological growth. It conducts applied research, facilitates product development and testing, and provides consultancy services to industries. CIRD collaborates with industries and government bodies to drive knowledge transfer, problem-solving, and skill development while promoting sustainability through resource efficiency and eco-friendly practices.

A major focus of CIRD is research and consultancy for thermal and hydropower plants operated by Jaiprakash Power Ventures Limited (JPVL). The center is actively engaged in multi-crore research and consultancy projects offered by JPVL, contributing to advancements in energy efficiency, operational optimization, and sustainable power generation. By bridging the gap between research and industry, CIRD plays a crucial role in driving technological excellence and industrial progress.

# **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 Preincubation 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
- 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 stainability; 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 JIIT 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 JIIT 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 JIIT, 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 JIIT 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, Gol 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, Waknaghat

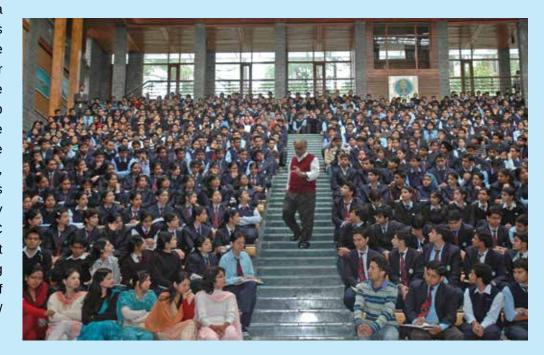
# Technology Incubation & Entrepreneurship Development Cell (TIEDC), (JUIT)

The Jaypee University of Information Technology has a Technology Incubation and Entrepreneurship Development Cell (TIEDC) since December 2016. The TIED cell focus on harnessing the talents and research strengths available in the area of different engineering disciples and apply the same to socially relevant projects in the form of start-up ventures. The main objectives of the incubation centre are 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 has dedicated space for Ideation, Network Meetings, Video Conferencing, conducting Boot campus, office work etc., and is equipped with the latest computers, Wifi, PowerPoint presentation, live video chat, and printing facilities. TIEDC also provides hands-on experiences facility to Innovators to develop prototypes / products in the Technological area by providing access to laboratory facilities. Apart from physical infrastructure, TIEDC also has a dedicated Pool of mentors, and experts in Technological area to support and mentor the startups. IT also supports startups in networking and showcasing their technologies, at different platforms. 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.



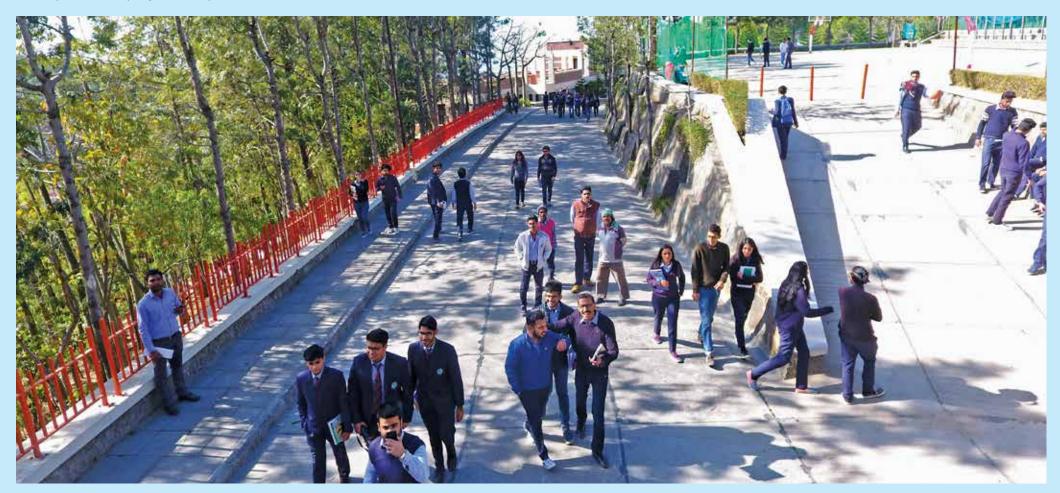
# Foreign Collaborations/MOUs

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
- 6. Universidad de Castilla-La Mancha \*UCLM), Spain.
- 7. MoU with IOWA State University



# **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.

#### **B.TECH IN ARTIFICIAL INTELLIGENCE & MACHINE LEARNING**

- **PEO 1:** Equip students with a solid foundation in both the theoretical and practical aspects of Artificial Intelligence (AI), Machine Learning (ML), and related fields, preparing them for successful careers in industry, advanced studies, or entrepreneurial ventures.
- **PEO 2:** Foster the ability to critically analyze, design, and implement AI and ML-driven solutions to address real-world challenges, promoting innovation and encouraging interdisciplinary collaboration.
- **PEO 3:** Cultivate a commitment to lifelong learning, ethical responsibility, and an awareness of the societal impacts of AI, ensuring graduates contribute positively to the environment and sustainability.

#### 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.

#### M.TECH. IN AI & DATA SCIENCE

- **PEO 1:** TEquip professionals with in-depth knowledge and expertise in Artificial Intelligence (AI), Machine Learning (ML), and Data Science, preparing them to thrive in industry, academia, research, and entrepreneurship.
- **PEO 2:** Develop graduates with strong skills in analysis, research, design, and implementation, empowering them to create innovative AI and data-driven solutions.
- **PEO 3:** Cultivate a mindset of lifelong learning, ethical responsibility, and interdisciplinary collaboration, enabling graduates to contribute significantly towards the society as AI/ML and data science professionals.

# **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:** TTo 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.

#### **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

#### **PEO**

#### **B.TECH IN MATHEMATICS AND COMPUTING**

of knowledge in Mathematics.

- **PEO 1:** To provide theoretical and practical knowledge in the domain of Mathematics & Computer Science Engineering for leading successful career in industries, entrepreneurial endeavours and pursuing higher studies.
- PEO 2: To develop the ability of critically thinking, analysing and decision-making in order to provide technologically, economically, and socially acceptable solutions to real-world computing issues.
- **PEO 3:** To inspire a professional, ethical, and lifelong learning mindset in order to embrace global challenges and have a positive impact on society and the environment.

#### 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.

#### **PEO**

#### M.Sc in Economocs

- **PEO 1:** To impart a dvanced theoretical and practical knowledge in Economics and allied fields.
- **PEO2:** To enhance knowledge and expertise for a successful career in academics, research and industry.
- **PEO3:** To develop professionals with rational economic reasoning.
- **PEO4:** To equip students with the skill of econometric modeling for forecasting of different industry needs.

#### M.Sc in Psychology

- PEO 1: To provide in-depth theoretical and practical expertise in the field of Psychology
- **PEO 2:** To enhance the cognitive, affective, and behavioural skills relevant to the demand of academia and industry.
- PEO 3: To prepare students for research and innovation in the field of Psychology
- **PEO 4:** To develop ethical and professional skills necessary for academic research and assessment in the field of Psychology.

# 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, entrepreneur- ship, 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 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.

#### **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.

## 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 centre of excellence with highest scholarly and entrepreneurial benchmarks in Electronics and Communication Engineering in India and abroad.

#### **MISSION**

- MISSION 1: To provide a thorough grounding in electronics & communication engineering and computer engineering through investigative laboratory work and classroom lectures and field demonstrations.
- MISSION 2: To promote the establishment of centres of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students.

**MISSION 3:** To discover and disseminate new finds from rigorous research that advances and improves the overall quality of life.

#### **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 1:** 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.

#### **PEO**

#### **BBA (BACHELOR OF BUSINESS ADMINISTRATION)**

- **PEO 1:** To acquire core business knowledge in a manner that enables application and innovation in different types of organizations such as corporate entities, government bodies, NGOs, inter-government organizations & start-ups.
- **PEO 2:** To prepare students to exhibit critical, analytical and reflective thinking to analyse business environment and take effective decisions.
- **PEO 3:** To learn to work with people, lead & engage them individually and as teams. To sensitively handle diversity in people in terms of gender, nationality, region, language, culture & beliefs and work with stated and unstated differences of views, beliefs & customs.
- **PEO 4:** To imbibe responsibility and respect for all and continuously strive for justice, ethics, equality, honestly, and integrity both in personal and professional pursuits.

# **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 students where they can learn and be competent users of mathematics and its applications.

**MISSION 2:** To strive by introducing the students to main ideas and methods of Mathematics for building up their reasoning and analytical skills.

**MISSION 3:** To provide quality Mathematics education to enhance the capability and competence in assimilating, dissecting and distilling information for engineering and technology applications.

#### **PEO**

#### **B.TECH IN MATHEMATICS & COMPUTING (M&C)**

**PEO 1:** Graduates will develop a strong foundational knowledge in mathematics and computing, enabling them to apply mathematical reasoning, computational techniques, and algorithmic processes to design and solve problems across a broad range of applications.

**PEO 2:** Graduates will demonstrate the ability to think critically and creatively to innovate and solve complex problems in mathematics and computing, including the capability to conduct research and integrate emerging technologies into their solutions.

**PEO 3:** Graduates will become effective professionals with a commitment to ethical practices, societal contributions, and lifelong learning. They will possess the skills necessary to lead projects and teams in multidisciplinary environments, both domestically and internationally.

**PEO 4:** Graduates will maintain an understanding of evolving technologies, adapting their skills accordingly to remain effective and relevant in the rapidly changing fields of mathematics and computing.

**PEO 5:** Graduates will excel in communicating complex mathematical and technical content clearly and effectively to a variety of audiences. They will also demonstrate the ability to work collaboratively in diverse teams, contributing effectively to the achievement of common goals.

#### **BACHELOR OF COMPUTER APPLICATIONS (BCA)**

**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.

#### **PMS**

#### **VISION**

To train students by imparting quality education in Physics & Materials Science in order to cultivate their professional skills for independent outlook towards higher education, research and technological development.

#### **MISSION**

**MISSION** 1: To impart outcome based education for preparing students to face challenges in industry and academia.

**MISSION 2:** To strive for excellence in performance-based teaching and research in order to maintain high levels of professionalism and integrity.

**MISSION 3:** To be recognized in scientific community in the fields of microstrip devices, nanomaterials, energy materials and sensors.

## **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 multidisciplinary 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. Apart from the Central Placement cell, the individual University has their own Training & Placement Cell to cater the Training and Placement needs of the respective University as well .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.



F	PLACEMENT	STATUS 20	24 BATCH :	JIIT, NOID	A
Branch	Eligible Participating Students	Total No. of Offers	% of Total Offers	Absolute Offers	% of Absolute Offers
CSE	449	505	112.47%	437	97.33%
ECE	188	184	97.87%	166	88.30%
IT	52	58	111.54%	50	96.15%
BioTech	32	27	84.38%	26	81.25%
Total	721	774	107.35%	679	94.17%
Pl	LACEMENT S	STATUS 202	4 BATCH:	JUIT, SOL <i>F</i>	AN
Branch	Eligible Participating Students	Total No. of Offers	% of Total Offers	Absolute Offers	% of Absolute Offers
CSE	219	210	95.9%	187	85.4%
ECE	12	12	100.0%	12	100.0%
IT	24	21	87.5%	19	79.1%
Bio Tech / Bio Info	10	11	110.0%	10	100.0%
Civil	07	04	57.1%	04	57.1%
Total	272	258	94.8%	232	85.3%
P	LACEMENT	STATUS 202	24 BATCH:	JUET, GUN	IA
Branch	Eligible Participating Students	Total No. of Offers	% of Total Offers	Absolute Offers	% of Absolute Offers
CSE	288	327	113.54%	268	93.06%
ECE	11	13	118.18%	11	100.00%
Mechanical	7	9	128.57%	7	100.00%
Civil	4	4	100.00%	4	100.00%
Chemical	5	6	120.00%	5	100.00%
Total	315	359	113.97%	295	93.65%

# **Recruiting Companies in 2024**

S.No.	Company	Sector
1	Force Motors	Automobile Manufacturing
2	Mahindra & Mahindra	Automobile Manufacturing
3	Shivalik Bank	Banking
4	Alcograin Distillers	Chemical
5	Antier Solutions	Consulting
6	AST Consulting	Consulting
7	Deloitte USI	Consulting
8	Effectual Knowledge Services	Consulting
9	EY India	Consulting
10	GreyB Research	Consulting
11	Jasper Colin Research	Consulting
12	KPMG	Consulting
13	VDX tv	Consulting
14	Watchguard Technologies	Consulting
15	Zelta Tech	Consulting
16	ZS Associates	Consulting
17	Open Systems	Consulting
18	Orange Business Services	Consulting
19	Techphosis	Consulting
20	MindCode Labs	Consulting
21	Mercari	E-commerce
22	Amazon	E-commerce
23	Collegedunia	E-commerce
24	Letzstepin	E-commerce
25	Magicpin	E-commerce
26	Snapdeal	E-commerce

S.No.	Company	Sector
27	Acmegrade	Education Technology
28	Bharat Digital	Education Technology
29	Convegenius	Education Technology
30	Geekster	Education Technology
31	Jaro Education	Education Technology
32	Kalvium	Education Technology
33	Learning Routes	Education Technology
34	Scaler Academy	Education Technology
35	Teachnook	Education Technology
36	TimesPro	Education Technology
37	TutorBin	Education Technology
38	Unacademy	Education Technology
39	Uolo Edtech	Education Technology
40	Wayspire Ed-Tech	Education Technology
41	Lutron Electronics	Electronics Manufacturing
42	Awesome Enterprises	Financial Services
43	Pay10	Financial Services
44	American Express	Fintech

S.No.	Company	Sector
45	Oracle Financial Soft-ware Services	Fintech
46	Tartan	Fintech
47	Adani Wilmar	FMCG
48	Nestle India	FMCG
49	Ingenuity Gaming	Gaming
50	Playsimple Games	Gaming
51	Super Six Sports Gam-ing	Gaming
52	CISCO	Hardware
53	TATA 1MG	Healthcare
54	Jindal Health Care	Healthcare
55	High Beam Global	Healthcare Technology
56	IDS Infotech	Healthcare Technology
57	Pramana	Healthcare Technology
58	Samplify	Healthcare Technology
59	Siemens Healthi-neers	Healthcare Technology
60	Zyla Health	Healthcare Technology
61	IIFL Livlong	Healthcare & Insurance
62	MyAnatomy	Human Capital Services
63	Rockwell Automation	Industrial Automation
64	Wissen Research	IPR & Consulting
65	Nyalazone Solutions	IT
66	Medtek.AI	IT

S.No.	Company	Sector
67	Accenture	IT
68	Accolite Digital	IT
69	Addverb Technolo-gies	IT
70	Agsure Innovations	IT
71	Antino Labs	IT
72	Appinventiv Tech-nologies	IT
73	AppVin Technologies	IT
74	Argusoft	IT
75	Ascent Risk & Resili-ence Software	ΙΤ
76	Asset Infinity	IT
77	Astarix	IT
78	Avi Software	IT
79	Avizva	IT
80	BezzieTech	IT
81	BUSY Infotech	IT
82	Cadera Infotech	IT
83	Capgemini	IT
84	ChangeCX	IT
85	Clarivate	IT
86	Coforge	ΙΤ
87	Cognizant	IT
88	CT Software Solutions India	ΙΤ
89	CyberForge	IT
90	DarwinBox	IT
91	Data Insights	IT
92	Debound	IT
93	Deltax	IT
94	EagleView	IT
95	EffiGO Global	IT

S.No.	Company	Sector
96	Evigway Technologies	IT
97	Finsol	IT
98	Futr Energy	IT
99	Futures First	IT
100	Gemini Solutions	IT
101	Genpact	IT
102	HashedIn by Deloitte	IT
103	Hexaware	IT
104	Hyperverge	IT
105	Infosys	IT
106	Intellicus	IT
107	Intellipaat	IT
108	InventIP	IT
109	ION Group	IT
110	JTP (Japan Testing Partner)	IT
111	Jungleworks	IT
112	Kickdrum	IT
113	Kratikal Tech	IT
114	Kuliza	IT
115	KushoAl	IT
116	L&T	IT
117	LambdaTest	IT
118	LatentView	IT
119	Lean Apps Software	IT
120	LTIMindtree	IT
121	Lumiq	IT
122	Mahindra Bristlecone	IT
123	Microsoft India	IT
124	Morgan Stanley	IT

S.No.	Company	Sector
125	Motherson Technology Ser-vices	IT
126	Mtree Software	IT
127	MyCaptain	IT
128	Netsmartz	IT
129	Newgen Software	IT
130	Nference	IT
131	Nine Dot Technologies	IT
132	Nucleome Informatics	IT
133	Octro	IT
134	OnActuate	IT
135	Phronesis Partners	IT
136	Pinnaxis Technologies	IT
137	Placify Technologies	IT
138	Plotline	IT
139	Q Spider	IT
140	Quarks Technologies	IT
141	Radius Infotech	IT
142	Randstad Digital	IT
143	RateGain Travel Technologies	IT
144	Recruit CRM	IT
145	Revvlocity	IT
146	Rohde & Schwarz	IT
147	rtCamp	IT
148	RxLogix	IT
149	S&P Global	IT
150	Salescode.ai	IT
151	Samsung R&D	IT
152	SAP Labs	IT

S.No.	Company	Sector
153	Servosys Solutions	IT
154	SmartData	IT
155	Soluzione	IT
156	Spyne	IT
157	SquadStack	IT
158	STMicroelectronics	IT
159	Successive Technologies	IT
160	Taazaa	IT
161	TCS	IT
162	Tech Mahindra	IT
163	Teqage International	IT
164	Thales Group	IT
165	Turing.com	IT
166	Vehant	IT
167	Webkul Software	IT
168	Wingify	IT
169	Workato	IT
170	World Fashion Exchange	IT
171	Yotta Data Services	IT
172	Z1 Tech	IT
173	Zopsmart Technologies	IT
174	Zscaler	IT
175	zuru.ai	IT
176	Zycus	IT
177	75ways Technologies	IT
178	Keyence India	IT
179	MAQ Software	IT
180	Rsystems	IT
181	Safe Security	IT
182	Simpplr	IT

S.No.	Company	Sector
183	Suntech Global	IT
184	VeriKraft	IT
185	Aten Ventures LLC	IT
186	Siemens	IT
187	Shipsy	Logistics
188	Wheelseye Technology	Logistics
189	Saint Gobin Glasses	Manufacturing
190	Dalmia Group	Manufacturing
191	Smartbrew Solutions	Marketing Technology
192	ABP Network	Media
193	MW Mines	Mining
194	Sarvagram	NBFC
195	Hyosung T&D India	Power Distribution
196	Tata Power	Power Distribution
197	LinkedIn	Professional Networking

S.No.	Company	Sector
198	AKS Group	Real Estate
199	Nestaway Technologies	Real Estate
200	Copperpod IP	Research
201	EvalueServe	Research
202	Expertlancing	Research
203	IMARC	Research
204	INJ Partners	Research
205	Research Wire	Research
206	Intel	Semiconductor
207	NXP	Semiconductor
208	ESQ	Services
209	Innobimb Infotech	Services
210	Zen Trades	Services
211	Middleware & Identity Management	Staffing
212	Ericsson	Telecommunication



# **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 JIIT**

Creativity and Innovation Cell in Electronics

**Knuth** - The Programming Hub

Game Development

Microcontroller based Systems and

**Robotics Club** 

Ribose - Technical Hub of Biotechnology

Deptt

AI & ML Hub

**Zencoders** – The Programming Club

Radiance - The Fashion Club

Jhankaar - The Dance Club

**Thespian Circle** – The Theatre Club

Cresendo - The Music Club

Parola – The Literary Club

Page Turner Society

Expressions – The Painting Club

Kalakriti - Rangoli and Art & Craft Club

**JPEG** – The Photography Club

Yoga, Health and Prahari Club

JIIT Economics and Business Hub

Marketing Mind Club

Fortissmo - The Music Hub

**Abhivyakti** – Street Play

Cinekala - The Videography Club

Panache - The Fashion Club

**CICR** - The Robotics Club

Rapid Programming Hub - The

**Programming Club** 

Optical Society of America (OSA), JIIT

Chapter

IEEE Student Branch, JIIT

# **Clubs at JUIT**

**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 JUET**

**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

**JUET Youth Club (JYC)** 

# **Service to the Society**

# **National Service Scheme (NSS) (JIIT)**

JIIT 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 Shikhsha 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. ofIndia. 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), Waknaghat 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) and National Service Scheme (NSS) (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.

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.





# **National Cadet Corps (NCC) (JUIT)**

The JUIT Waknaghat has introduced NCC for both girls and boys. For girls, the Senior wing was started in 2018 and for boys, the Senior division was started in 2019. The allotted strength for girls is 53 whereas for boys allotted strength is 80. Volunteer students can apply for NCC during their first year. The selection in carried out by H.P. battalion NCC, Solan based on practical tests and interviews at the university campus. Participation by students in NCC enhances their personality and gives them an edge during placements and job interviews.

# 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".

# **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 checkups 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.

Thee 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.

# The state of the s

#### **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.









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.









# 2025 Admission Shall be based on:

- (a) JEE-2025 All India Ranking
- (b) 10+2 marks based merit



# JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY, NOIDA, U.P.

(Declared Deemed to be University under section 3 of the UGC Act, 1956) A-10, Sector 62, Noida-201309 (U.P.) Tel.: +91-120-2400972-76 Website: www.jiit.ac.in



# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT, H.P.

(Approved by UGC under section 2(f) of the UGC Act ,1956)
P.O. Waknaghat, Teh. Kandaghat, Distt. Solan-173234 (H.P.)
Tel.: 01792-257999, 245371 Mob.: 7807846047/48/49/50 Website: www.juit.ac.in



# JAYPEE UNIVERSITY OF ENGINEERING & TECHNOLOGY, GUNA, M.P.

(Approved by UGC under section 2(f) of the UGC Act, 1956) A.B. Road, Raghogarh, Distt Guna-473226 (M.P.) **Tel.:** 07544-267051, 267310-14 **Website:** www.juet.ac.in



# JAYPEE UNIVERSITY, ANOOPSHAHR

(Established under Govt. of Uttar Pradesh Act No. 8 of 2014) Aligarh Road, Anoopshahr, Distt. Bulandshahr -203390 (U.P.) **Website:** www.jaypeeu.ac.in **Tel.:** 7055922777, 7055922888

For admission enquiries write to admission@jiit.ac.in