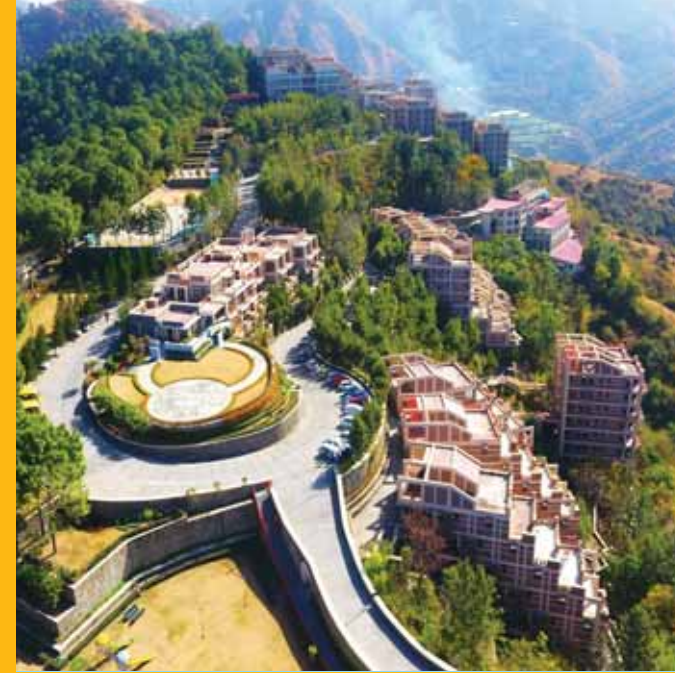




# ADMISSION BROCHURE

# 2020



Jaypee Higher Education System  
Building Intellectual Capital





## Founder Chairman's Message

---

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

The Jaypee Group has always been proud to participate in nation building right from its inception. We feel doubly responsible to make this Group to become a benchmark of contribution to the 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.

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

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

AICTE approved, NAAC accredited and NIRF ranked, Jaypee Institute of Information Technology (JIIT), Noida, set up 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 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 an exciting and memorable experience.

JIIT is a fully airconditioned campus, has an unparalleled State-of-the-art, high-tech and environmentally conditioned infrastructure with a built up area of over 141610 sq.m with residential campus, Academic Block comprising Lecture Theaters, Smart Classrooms, Labs, Learning Resource Centres with rich resources of print books, e-books and e-journals, Faculty Residences, Student Hostels, Annapurna, 2500 capacity Auditorium, advanced Audio Visual facility and high capacity internet connectivity.



# Programs of Study

## Undergraduate (4 Years)

### B.Tech.

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

## Undergraduate (3 Years)

### BBA at Jaypee Business School

## Integrated M.Tech. (5 Years)

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

## Post Graduate (2 Years)

### M.Tech.

- Biotechnology(BT)
- Computer Science & Engineering (CSE)
- CSE with specialization in
  - ✓ Data Analytics
  - ✓ IT & Entrepreneurship
  - ✓ Artificial Intelligence and Machine Learning
  - ✓ Internet of Things
- ECE with specialization in
  - ✓ Machine Learning and Signal Processing
  - ✓ Wireless Communication
  - ✓ Microelectronic Systems and Internet of Things

### M.Sc

- Physics
- Mathematics
- Microbiology
- Environmental Biotechnology
- Quantitative Economics

## MBA (2 Years) at Jaypee Business School

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

## Ph.D

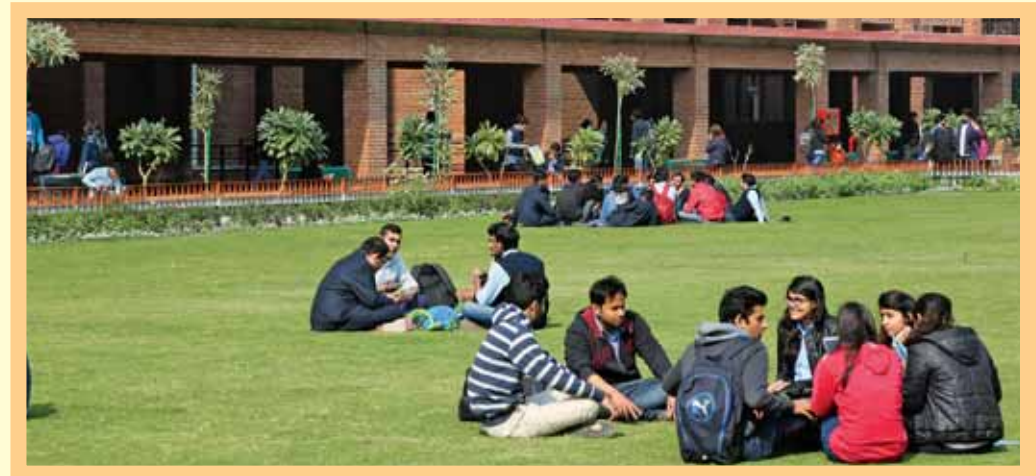
Biotechnology, Computer Science & Engineering, Electronics & Communication Engineering, Humanities & Social Sciences, Management, Mathematics, Physics & Materials Science and Engineering.

Student/Faculty Profile		
YEAR	STUDENTS	FACULTY
July 2001	250	15
Dec 2019	4903*	274**

\* Of above students, 307 are Ph.D scholars, 65 M.Tech, 140 MBA, and 60 M.Sc Students.

\*\* 175 faculty members with Ph.D degrees.

Infrastructural Details		
Item(s)	2004	2018
Covered Area (sq.m.)	46,000	141610
Hostel Seats	872	2547
Computers (PCs)	270	2600
Laboratories (No's)	6	102



## Significant Achievements/Highlights

- NIRF (MHRD) All India Rankings :  
2016 - Ranked 60th at the national level amongst all the Govt. and private Engineering institutions.  
2017 – Ranked 54th in Engineering Category.  
2018 – Ranked 70th in Engineering Category.  
2019 – Ranked 80th in Engineering category.
- Accredited by NAAC in November 2015 for 5 years.
- 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.
- 13300 alumni including 196 Doctoral, 1638 M.Tech (including Dual-degree), and 1537 MBAs
- Organized 33 International conferences, about 300 invited talks, and 110 workshops and seminars with 6500 delegates from India and abroad during last 7 years.
- Contributed 3900 Research Papers in International and National Journals/ Conference, 31 Books and 185 Book Chapters/Case studies
- Received 35 research grants of Rs. 7.91 Cr from different government agencies so far.
- Option of VIII Semester Studies at University of Florida at Gainesville for selected UG students.
- Credited with 7 Patents filed, 6 patents published, 1 patent granted and 1 technology transfer.
- Participates in Smart India Hackathon, MHRD, GOI. In 2019, 4 teams won first prize and 1 team was 1st Runner-up at All India level.
- Participates in Unnat Bharat Abhiyan(UBA) of MHRD, GOI. Five villages adopted under UBA for their development.
- Options available for credits completion through MOOC courses available from NPTEL and SWAYAM, MHRD,GOI.
- Students documents deposited in National Academic Depository (NAD).
- Participation in Swachch Bharat Abhiyan of GOI.
- Has Institution Innovation Council (IIC) to promote Innovation and Entrepreneurship among students and linked to MHRD's Innovation Cell, GOI.
- Participates in Study in India Program of MHRD, GOI for admissions of foreign students, which is available to the 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 MHRD's Innovation Cell, GOI.



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

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

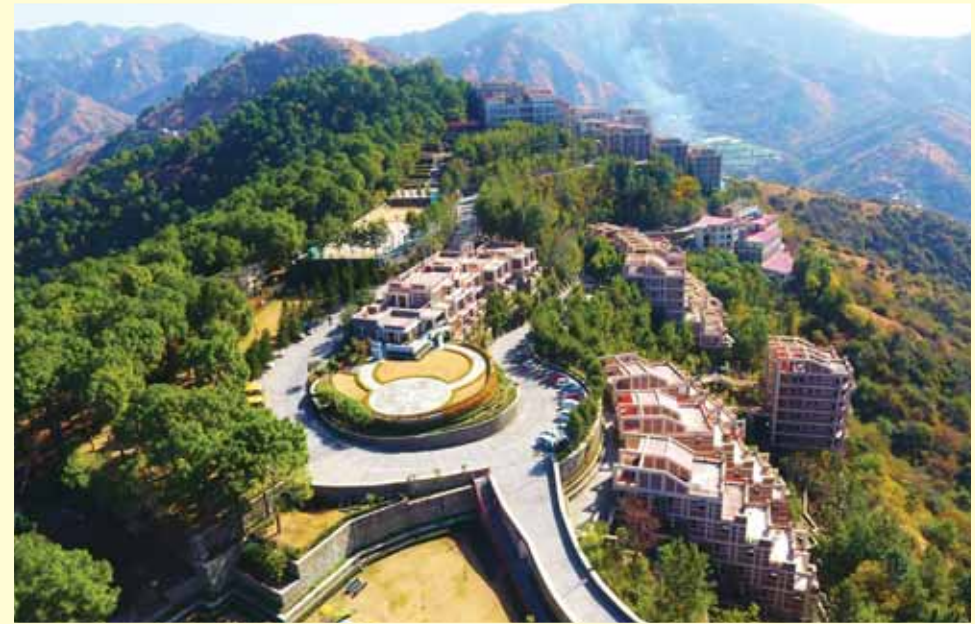
NAAC accredited, NBA Accredited, NIRF ranked, Jaypee University of Information Technology, Waknaghat, H.P, was set up in 2002, and conferred the status of State University by Act No. 14 of 2002 vide Extraordinary Gazette notification of Government of Himachal Pradesh dated May 23, 2002. Spread over 10 hectares of lush green picturesque slopes of Waknaghat, in District Solan of Himachal Pradesh, covering a total built up area of over 73464.81 sq.m. comprising Academic Block (with lecture theatres, classrooms, tutorial rooms, laboratories, administrative and faculty offices, and library), hostels for boys and girls, faculty residences, Guest House, Annapurna, Auditorium, sports facilities and other associated services.

At present, around 1476 students (boys and girls) alongwith 95 faculty members reside on the campus. Internet connectivity is available to all faculty & students.

The University encourages all students to make life outside the classroom vibrant and enjoyable by engaging themselves in multiple extracurricular areas. This is enhanced by best of facilities and equipment designed to make life outside the classroom an exciting and memorable experience.

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

All the lecture theatres/classrooms have multimedia projection systems for facilitating computer-based and web-based learning. Besides the computer laboratories, the University has other well-equipped labs in Electronics, Communication, Bioinformatics/ Biotechnology and Civil Engineering disciplines. There is a language laboratory to assist students enhance their language communication skills



# Programs of Study

## Undergraduate (4 Years)

### B.Tech.

- Bioinformatics (BI)
- Biotechnology (BT)
- Civil Engineering (CE)
- Computer Science and Engineering (CSE)
- Electronics and Communication Engineering (ECE)
- Information Technology (IT)

## Post Graduate (2 Years)

### M.Tech.

- Biotechnology (BT)
- Civil Engineering with specialization in -
  - ✓ Construction Management (CM)
  - ✓ Environmental Engineering (EE)
  - ✓ Structural Engineering (SE)
- Computer Science and Engineering (CSE)
- \* Computer Science and Engineering (Information Security) CSE (IS)
- Electronics and Communication Engineering (ECE)

### M.Sc

- Bioinformatics (BI)
- Biotechnology (BT)
- Physics (PH)
- Statistics (ST)

Note : For Course Structures of above programs refer [www.juit.ac.in](http://www.juit.ac.in)

## Ph.D

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

### Student/Faculty Profile

YEAR	STUDENTS	FACULTY
July 2002	172	12
Sep 2019	1804*	105**

\*\* Of above, 145 are Ph.D scholars; 26 are M.Tech., 22 M.Sc. and others B. Tech students.

\*\* 85 faculty with Ph.D degrees

For name and academic biodata of faculty, refer University website [www.juit.ac.in](http://www.juit.ac.in)

### Infrastructural Details

Item(s)	2004	2019
Covered Area (sq.m.)	31,420	73,864.81
Hostel Seats	500	1800
Computers (PCs)	300	1192
Laboratories (No's)	12	57



## Significant Achievements/Highlights

- Accredited by NAAC twice (2011 & 2017), and UG programs of study accredited by NBA (AICTE) in - 2009 , 2014, 2017 and two programs have been extended upto 2020.
- Ranked amongst Top Engineering Institutes under National Institutional Ranking Framework (NIRF) by MHRD, GoI for last four consecutive years.
- India Today ranked JUIT 14th in India's Best Technical Universities and 5th highest in number of Patents granted in 2019.
- JUIT Ranked 1st in Private Universities in HP and 3rd in Top 30 Private Universities in India by Dialogue India – 2019.
- 8th Semester Studies at University of Florida, USA, TAMK Finland, South Dakota

School of Mines & Technology, USA & University of Nebraska at Omaha, USA for selected UG students.

- 82 percent faculty with Ph.Ds from reputed IITs / Universities having vast teaching experience.
- Has Green and Smart Campus infrastructure architecturally designed by Arcorp, Canada. Wifi with 24x7 Water and Electric Supply.
- Contributed more than 2976 Research Publications, 65 Books and 170 Book Chapters.
- Organized 20 International Conferences, 197 invited talks, 69 national workshops with around 5000 delegates from India and abroad.
- Received 82 research grants from various Government Agencies.
- 30 percent Tuition Fees concession to Wards of serving and retired Armed Forces and Paramilitary Forces personnel for Undergraduate programs. Additional 5 percent (35%) for Wards of War Widows.





# 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)

Jaypee University of Engineering & Technology, Guna has been established vide Government of Madhya Pradesh Gazette extra ordinary No.3 of 2010 dated 29th April 2010 as a private university in the State of 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 very first cycle of Accreditation in 2016.

University's location at Raghogarh, in Guna district, is a well thought out as it serves backward district of MP such as Shivpuri, Gwalior, Sheopur, Ashoknagar, Sagar, Rajgarh, Vidisha etc. This region, currently in a rural setting with strong agricultural activities is likely to grow as a major industrial hub. JUET is being developed as a major center to provide competent, well trained technical manpower to the region.

The University campus on the national highway linking Agra to Mumbai, sprawls over 125 acre as a modern institution of higher learning in the field of engineering and technical education.

The academic activities started in the year 2003. Presently, the university offers programs of three faculties named as Faculty of Engineering, Faculty of Mathematical Sciences and Faculty of Sciences.

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



# Programs of Study

## Undergraduate (4 Years)

### B.Tech.

- Chemical Engineering (CHE)
- Civil Engineering (CE)
- Computer Science & Engineering (CSE)
- Electronics & Communication Engineering (ECE)
- Mechanical Engineering (ME)

## Undergraduate (3 Years)

### B.Sc. (Honors)

- Mathematics
- Physics
- Chemistry

## Post Graduate (2 Years)

### M.Tech.

- Chemical Engineering
- Computer Science & Engineering
- Electronics & Communication Engineering
- Civil Engineering
  - ✓ Structural Engineering
  - ✓ Environmental Engineering
  - ✓ Mechanical Engineering with specialization in Manufacturing Technology

### M.Sc

- Mathematics
- Physics
- Chemistry

### Ph.D

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

Student/Faculty Profile		
YEAR	STUDENTS	FACULTY
Jul-2003	102	10
Sep-2019	1364*	75**

\* Includes Ph. D., M. Tech., M.Sc., B. Tech., and B.Sc (Honors) students.

\*\* 52 faculty members with Ph. D degrees; 23 from IITs/IIITs & NITs.

Infrastructural Details		
Item(s)	2003	2019
Covered Area (sq.m.)	15000	143823
Hostel Seats	300	2255
Computers (PCs)	30	900
Laboratories (Nos)	6	54



## Significant Achievements/Highlights

- Grade 'A' accredited by NAAC for 5 years from 5.11.2016 and received special appreciation for carbon positive campus.
- Ranked 151-200 Band 2018 in Universities in India by National Institutional Ranking Framework (NIRF) of Ministry of HRD, Govt. of India.
- Awarded "Excellent University Award" by Madhya Pradesh Private University Regulatory Commission, Bhopal in 2018.
- Additional certification programs with Cisco Network Academy being offered.
- Remote Center of IIT Mumbai & IIT Delhi (virtual lab) under NME-ICT Program of Ministry of HRD.
- Summer Training/Internship with Foreign Universities like University of Florida.
- Best Accredited Student Branch of Computer Society of India (CSI) in 2017.
- Ranked 32 In CodeChef as on May 2019. [www.CPCTRL.com](http://www.CPCTRL.com)
- World Rank 65 based on University Code Sprint-4 event conducted by HackerRank Competitive coding platform in February 2018. (<https://www.hackerrank.com/contests/university-codesprint-4/leaderboard/school/3>)
- 5522 Alumni including 81 Doctoral, 208 M. Tech., 1 M.Sc., 5 B.Sc. (Honors), 4765 B.Tech. and 462 Diploma.
- Organized 11 National/International Conferences, 32 National/International workshops, 24 Short Term Courses/Training Programs/Seminars, around 2200 delegates, 180 invited talks and 10 FDPs.
- Contributed more than 1350 Research papers, 40 Books and Book Chapters. Received 18 Research Grants from different government agencies.
- MOU with CSIR through CBRI, Roorkee and MNNIT Allahabad.
- Prof. Carsten Mueller of Germany, a visiting Professor at the university, conducts one elective course in CSE every year.
- Networked campus with NKN (National Knowledge Network), BSNL, Airtel and Reliance JIO.



# Jaypee University Anoopshahr, Bulandshahr, U.P.

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

Jaypee University at Anoopshahr is an Interdisciplinary University established by the act No. 8 of 2014 of Govt. of UP. As per sanction of the Govt. of Uttar Pradesh, received vide its Letter No. 347/ Sattar-1-2014-20(4)/2011. The University started functioning in 2014 with B. Tech. programs in five disciplines. It is located in the hinterland of Uttar Pradesh in serene and pious environment on the banks of holy river Ganges. It is sponsored by JaiprakashSewaSansthan (JSS), a not-for-profit-trust. Jaypee University, Anoopshahr is shaping students with holistic approach in achieving their lifelong objectives and attempting to produce not only literate and educated manpower, but also personalities with ethical and moral values to serve the society in true spirit.



## Programs of Study

### Undergraduate (4 Years)

#### B.Tech.

- Computer Science & Engineering (CSE)
- Electronics & Communication Engineering (ECE)
- Information Technology (IT)
- Civil Engineering (CE)
- Mechanical Engineering (ME)

### Undergraduate (3 Years)

#### B.Sc. (Honors)

- Mathematics (MA)
- Physics (PH)
- Electronics (EX)
- Computer Science (CS)
- Information Science (IS)

#### B.A.

B.A. in Journalism and Mass Communication

B.A. (Honours) in Economics

#### B.Com. (Honours)

B.B.A. (Agricultural Business, Digital Marketing, Healthcare Management, Hospitality Management)

## Significant Achievements/Highlights

- A new generation Interdisciplinary University aiming to produce quality professionals capable of meeting global challenges.
- Set-up in about 100 acres of lush green environment on the banks of Holy River Ganges, providing serenity and intellectually stimulating environment.
- Shares academic synergy, experience, cooperation and support of the existing Jaypee Universities: JIIT - Noida, JUIT -Waknaghat and JUET - Guna.
- Fully equipped, updated and operational infrastructure.
- Key infrastructure and resources include well qualified and experienced faculty, fully equipped labs, well stocked library, separate hostel for boys and girls, fully networked campus, facilities for games and associated utilities for students comfort and providing excellent environment for teaching learning process.
- Existing Training and Placement (T&P) unit of Jaypee Universities facilitates placements.
- Well connected by road from Aligarh, Moradabad, Sambhal, Badaun, Meerut, Ghaziabad, Noida /Delhi.

# Libraries

## Learning Resource Centre (JIIT)

(LRC at JIIT Noida is an excellent repository of learning resources. It is fully integrated with the latest barcode technology and international standard open source library management software "KOHA". Users can access bibliographic details of the LRC resources through OPAC anywhere, thus providing 24 hours access. The LRC consists of latest collection of textbooks as well as reference books, national as well as international peer reviewed journals, magazines and electronic resources on subject areas covered by the academic curricula of the Institute and other universal knowledge. LRC has provisions to subscribe full text science and technology on-line journals and other national and international journals in printed form. It is also an active member of Developing Library Network (DELNET) and provides inter-library loan services to its users. LRC has Anti-Plagiarism Software "Turnitin" for its users. The open access system has been adopted at all service points where users may select material of their choice. LRC has implemented an anti-theft electromagnetic system at its main gate. LRC keeps itself updated by organizing book exhibitions/ conferences/ workshops from time to time.

JIIT Noida has three Libraries – One Central Library at Sector-62, One Library at Sector-128, Noida and third Library at JBS for Management students. All students have access to all the three libraries. LRC has approximately.

• Book Titles :	25500
• Book Volumes :	73387
• Print Journals :	82
• e-Journal :	17000
• Other online resources :	350000
• National Digital Library Contents :	420000



## Learning Resource Centre (JUIT)

LRC at JUIT Wanknaghat is a backbone of academic and research activities of the University. It keeps all its users abreast with latest happenings in their respective areas of learning by pooling information resources, organizing book exhibitions and user awareness programmes on a regular basis.

It caters to a wide range of information resources in the areas of Computer Science, IT, Civil Engineering, Biotechnology, Bioinformatics, Mathematics, Physics, Materials Science, Electronics, Communication Engineering alongwith collections in Humanities and Social Sciences. It also provides quality and latest books on competitive examinations and general reading. It subscribes to over 100 print periodicals of repute. Subscriptions to various local, regional and national newspapers in Hindi and English are the key part of the library. The LRC activities are fully computerized with the help of Library Management Software, known as 'LIBERTY' and 'KOHA'. This provides seamless access to bibliographic details of library holdings through its OPAC feature from anywhere anytime. It subscribes to various scholarly databases such as ACM, IEEE, SpringerLink, ASTM, ASCE, JGate, etc along with complementary access to over 42 Lakh e-books through INFLIBNET (an IUC of UGC). The LRC is an active member of the Developing Library Network (DELNET) providing inter-library loan services to its users and a member of the National Digital Library (NDL) which is a project under Ministry of Human Resource Development, GOI providing a single window access to indexed content from premier learning institutions in India and abroad. The JUIT provides access to over 1500 documents through NDL. It also contributes actively to Shodhganga and Shodhgangotri repositories of UGC.

• Book Titles:	21900
• Book Volumes:	42106
• Print Periodicals:	113
• E-Journals:	6938
• Other online resources:	8359
• E-Books and National Digital Library Contents:	4.1 Lakh+



## Learning Resource Centre (JUET)

LRC at JUET Guna is an excellent repository of learning resources. It is situated in AB-III, which can accommodate about 250 users at a time. It has more than 30 computer nodes with high speed Internet & Intranet connectivity. Systems of LRC are fully integrated with the latest barcode technology and International standard library management software Liberty. Users can access bibliographic details of the LRC through OPAC from any node of the campus, thus providing 24X7 access. The open access system has been adopted at all service points where users may browse and select material of their choice. The LRC consists of latest collection of textbooks, reference books, national and international peer reviewed journals, magazines and electronic resources on subject areas covered by the academic curricula of the University. LRC has made provisions to subscribe full text engineering journals in printed form. It is also member of Developing Library Network (DELMNET) 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 "URKUND" is available under ShodhShuddhi program of Ministry of HRD, Govt. of India. Subscriptions of 5000+ e-magazines and periodicals are available through Magzter. LRC collections are being updated periodically.

• Book Titles:	8593
• Book Volumes:	35241
• Printed Journals:	23
• e-Journals:	14536
• Other online resources:	2,90,000
• National Digital Library Contents:	4,20,000



## Centres for Excellence

### JIIT, Noida

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

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

#### Centre for Performance Modelling of Computing Systems (CPMCS)

Centre for Performance Modelling of Computing Systems (CPMCS) has been initiated to provide a platform to researchers to share their experiences, insights, and challenges regarding modelling, 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 CoventorWare (01 license) and MEMS Plus (01 license), Intellisuite 8.7 (01 license) and COMSOL Multiphysics (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

Newly emerged, re-emerged infectious and life style diseases constitute a global threat that puts every nation and every person at risk. 'Centre of Emerging Diseases addresses questions of molecular pathogenesis of emerging viral and bacterial pathogens (host pathogen interactions, essential metabolic pathways of pathogens), structural biology, life style diseases such as cancer, cardiovascular diseases and the design of novel diagnostics and therapeutics. The research activities at the Centre has generated ~7.5 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

New advances in biotechnology are providing great insights into the workings of nature, presenting interesting opportunities to apply principles of biology to different fields of science. Sustainable solutions are emerging to address the concerns on improving crop productivity, depleting natural resources, environmental pollution, safety of food and agricultural products etc. Concurrently, there is an increasing demand for natural bio-products of therapeutic and industrial importance (in the areas of healthcare, environmental remediation, agriculture biotechnology). Hence research activities of the Plant and Microbial Biotechnology group at Department of Biotechnology are comprehensively focused up on major sectors viz., 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 group has garnered extra mural funding from Department of Biotechnology (DBT), Department of Science & Technology (DST), Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Ministry of Environment, GoI and Council of Science and Technology, U.P





# JUIT, Wagnaghat

## Centre for Healthcare Technologies and Informatics (CEHTI)

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

The very first National workshop of the Centre was on Bioinformatics and Biomedical Image Analysis (NBBIA) was organized by CEHTI during 29-31 May, 2019. More than 20 participants from all over the country participated from Palampur, Dharmashala, Solan, Shimla, Chandigarh, Dehradun, Allahabad and Delhi.

It is anticipated that CEHTI will provide global leadership in health information through creativity, state-of-the-art workshops and training programs.

## 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, Solar cells), pine briquettes, biofertilizers, rain harvesting, and water recycling. CESTRD is also determined to train the rural youth 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 consultancy, training and workshop sessions. The highlights of the centre (2018-2019) are:-

- The Centre has established biogas reactors in various Govt. schools (Solan, Sirmaur, Bilaspur Districts) of Himachal Pradesh. These biogas reactors running on food waste and gas, fulfill the partial need for cooking the mid day meal in schools. The centre has also established biogas reactors at JUIT - one for marginal families in JUIT (October, 2019), and other supplies cooking gas to worker's mess. The Govt. of Himachal Pradesh and Jharkhand have empanelled JUIT as technical agency in biogas.

- The Centre organized seminars in the field of Renewable Energy in collaboration with Chamber of Industries and TIEDC, JUIT.
- The CESTRD has developed vermicompost for the use of horticulture.
- The CESTRD imparted training on organic farming to students and faculty of various educational institutes.
- The Centre organized a week long program (4th to 9th November, 2019) on Sustainable Technologies for outstation students. They were trained in Biogas fabrication & working, Briquettes formation from Pine needles, Vermicomposting, Green house technologies, Solar technologies, Waste water treatment technologies. The students from various schools, colleges and Universities of Himachal Pradesh and Punjab attended this program.

In near future, the centre is taking up a program of Skill development for science graduates of Himachal Pradesh.

## Centre for Structural Engineering and Sustainable Development

The Centre of Structural Engineering and Sustainable Development encompasses the modern world's needs such as those pertaining to earthquake-mitigation, disaster management, energy efficient green buildings and multi-hazard assessment of the built environment. The following advanced studies are undertaken:

- a) Seismic-vulnerability assessment of the existing Civil Engineering infrastructure in the hilly region (in the state of Himachal Pradesh) and suggest remedial measures such as retrofitting strategies and develop new low-cost earthquake-mitigation techniques for residential buildings. This has become even more important given that few major earthquakes are imminent in the Himalayan region.



- b) Multi-hazard assessment of the buildings, especially those exposed to jungle-fire or landslides, in order to develop remedial measures to minimize the damage to the infrastructure and saving lives and property.
- c) The structural design philosophies have been changing over decades; viz. from working stress method (WSM) to limit state design (LSD) to performance based design (PBD). It has been observed that ignoring uncertainties in various input parameters may lead to underestimated or overestimated design of structural systems. There is a need of reliability-based design of structures and foundations. This will remain one of the focus areas in the vision items postulated herein.
- d) Sustainable development is yet another important aspect to be stressed upon. This is the infrastructural development that meets the needs of the present without compromising the ability of future generations to meet their own needs. One of its key concepts is the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. Development of new materials (such as self-healing concrete, pine-needle embedment) with optimal utilization of locally available resources and design the dwelling units with such volumes orientation and opening-sizes so as to minimize energy requirements, is the main focus of this proposal. This will help protect the environment with minimal CO2 emissions.

## 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)

A 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.



# Entrepreneurship Development Centre

## JIIT, Noida

### Jaypee Entrepreneurship Development Centre

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

## JUIT, Wagnaghat

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

TIEDC is supported by the Department of Industries, Himachal Pradesh under Chief Minister's Startup / Innovation Projects / New Industries Scheme. TIEDC works to harness the talents and research strengths available in different engineering disciplines and apply the same to socially relevant projects in the form of Startup Ventures. It provides mentoring and technological guidance to the prospective entrepreneurs.



# 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. Alliance of 4 Universities (A-4A) of Spain
6. University of Malta



# UG Programs 2020-21

Programs / Total No. of Seats	JIIT – Noida (Sec. 62 & 128)	JUIT – Waknaghat, H.P.	JUET – Guna, M.P.
		1320	570
B. Tech. Disciplines offered (seats)	CSE (540) ECE (480) IT (60) BT (60)	BT (30) CE (60) CSE (330) ECE (60) IT (90) BI (30)	CSE (300) ECE (60) CE (90) CHE (30) ME (120)
Integrated M.Tech	CSE (30) ECE (30) BT (30)		
B.B.A	90	–	–
B.Sc (Hons)	–	–	Mathematics (10) Physics (10) Chemistry (10)

- **Minor Specialization :** A B.Tech student can have minor specialization alongwith the major specialization, if the student completes additional 20 credits. These could be acquired through MOOCs, for ex. a student of ECE can have minor specialization in CSE or BT.
- **Proficiency Certification:** Proficiency certificate is given in niche areas of high importance in present time / future by opting for electives in that area. Areas, for ex., specializations like Artificial Intelligence(AI), Internet of Things(IOT), Data Analytics(DA), Machine Learning(ML), Cloud Computing(CC) etc.



# UG Programs

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

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

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

Large number of electives offer 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 minor / major projects. Learning in practical subjects is facilitated by well equipped laboratories while being continuously supported by faculty members, PhD and M.Tech. (Teaching Associates) as well as fourth year B.Tech students as mentors.

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, Mobile and Ubiquitous Computing, 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 is the result of all these concerted efforts that the placement statistics are very enthusiastic and eligible students get job offers through campus placement.



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

The electronics and communication industry is continuously changing and we need to move ahead to be ready with the requirements. This, precisely, is what Departments of Electronics and Communication Engineering (ECE) is about. Electronics and Communication Engineering discipline spans a diverse set of intellectual subfields and applications. The subfields can be grouped into 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, two minor projects of duration of one semester and one major project of two semesters duration 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 certificates in areas like IoT & AI, Wireless Communication, VLSI Circuits & Semiconductor Devices, Signal Processing and Machine Learning etc. 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 exponential growth and rapid development in modern biotechnology (BT) and bioinformatics (BI), as well as the diversity of knowledge and skills required to pursue careers in biotechnology, has inspired us to educate and train youth in BT & BI. The program makes available specialized labs in areas such as Proteomics & Genomics Technologies, Plant Biotechnology, Microbial Biotechnology, Animal & Plant Cell Culture, Environmental Biotechnology, and Industrial Biotechnology.

Biotechnology has emerged as excellent technology with immense potential and remarkable impact on human life. India shares approximately 3% in the global Biotechnology industry and ranked among top twelve in the world and expected to contribute India's USD 5



Trillion economy by 2024. The curriculum provides engineering interface and integrates core subject area knowledge with professional development; focusing on entrepreneurship, analytical and research skills. The research emphasis is reflected in the active doctoral program, 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.

Interaction with leading scientists from academia and industry through invited lectures, workshops and conferences ensures overall progress and enhancement of the students' technology skills.

### Civil Engineering (JUIT & JUET)

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, Hydropower and Environmental Engineering. The curriculum has been developed to keep it more practical and industry oriented without compromising on its academics rigour. 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, Geotechnical Engineering, Environmental Engineering, Highway Engineering and Surveying, in addition to the traditional Engineering Graphics and Workshop Practices. All laboratories are equipped with modern equipments and facilities highly trained manpower. Students are exposed to construction industry during the practical training in reputed construction companies.

Training on software like STAAD Pro, MATLAB, Auto-CAD and PRIMAVERA enhances employability of students in the various fields of Civil Engineering. Opportunities are provided to students for post graduation and research in the areas of Geotechnical, Structural, Environmental and Transportation Engineering.

### 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 humans. Anticipating a 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 multidisciplinary nature of Bioinformatics involves in-depth knowledge in Biotechnology, Computer Science and 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.



## Chemical Engineering (JUET)

The objectives of the program are 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 & troubleshooting. 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.



## Mechanical Engineering (JUET)

Mechanical Engineering is offered by the Department of Mechanical Engineering JUET-Guna. The department has established laboratories like Thermodynamics, Computer Aided Design, Strength of Materials, Fluid Mechanics & Machinery, Measurement & Control, Theory of Machine, I.C. Engines, Heat & Mass Transfer, Advanced Machining, Refrigeration & Air Conditioning, Dynamics of Machines, Additive Manufacturing (AM) and CIMS, 660 MW 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.

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

The 3 year full time BBA curriculum is imaginative, flexible and comprises of creative combinations of disciplines of study. Innovative and stimulating pedagogical practices stimulate the students' learning experience. The BBA program aims at developing in the students a set of broad based competencies, an understanding of the social & human context and instil in them strong ethical values.

The broad goal of BBA program is to provide the students a general education curriculum that enhances learning in multiple disciplines along with indepth knowledge of management discipline. In this way the students are prepared to deal with complexity, diversity and change. Value added courses on communication, analytical and problem solving skills and theatre-equip the students with the ability to apply knowledge and skills in the real world settings.

The curriculum of 3 year undergraduate BBA program is designed with the options of specialization in Finance, Marketing, HR, IT applications in Management, Data Analytics, Insurance & Banking, Family business & Entrepreneurship, Healthcare Services Management, Real Estate and Urban Infrastructure. The curriculum is spread over six semesters with each semester having sixteen weeks that includes teaching and evaluation. Last two semesters of the program make provision for choice of discipline specific electives for specialization. Successful graduates of this course can opt for a range of jobs from sectors like finance, marketing, sales, management, government, HR, data analytics, health and Education.





# 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.

## Biotechnology

Department offers a five years Integrated M. Tech Program with additional specialized core



and elective courses such as Biomolecules and Cell Communication, Nanobiotechnology, Regulatory Affairs, Drug Delivery, Public Health, IPR in Biotechnology, Disease and Health Care, Phytotherapeutics and Pharmacology, Biosensors, Sustainable Agriculture, Genomics & Society, Biostatistics, Product Development in Biotechnology, Experimental models in Research and Molecular Diagnostics. Students have an option to undertake industrial project in the final semester or do in-house M. Tech Dissertation or Entrepreneurship as a continuation of their project work. Students are encouraged and provided opportunities to work on research based projects resulting publications in journals of International and National repute.



## 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 2020-21

Programs / Total No. of Seats	JIIT – Noida, U.P.	JUIT – Waknaghat, H.P.	JUET – Guna, M.P.
M.Tech.	<ul style="list-style-type: none"> <li>• Biotechnology</li> <li>• Computer Science &amp; Engineering</li> <li>• CSE with specialization in :               <ul style="list-style-type: none"> <li>✓ Data Analytics</li> <li>✓ IT &amp; Entrepreneurship</li> <li>✓ Artificial Intelligence and Machine Learning</li> <li>✓ Internet of Things</li> </ul> </li> <li>• ECE with specialization in :               <ul style="list-style-type: none"> <li>✓ Machine Learning and Signal Processing</li> <li>✓ Wireless Communication</li> <li>✓ Micro Electronic Systems &amp; Internet of Things</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Biotechnology</li> <li>• Computer Science &amp; Engineering</li> <li>• CSE with specialization in :               <ul style="list-style-type: none"> <li>✓ Information Security</li> </ul> </li> <li>• Electronics and Communication Engineering</li> <li>• Civil Engineering :               <ul style="list-style-type: none"> <li>✓ Construction Management</li> <li>✓ Environment Engineering</li> <li>✓ Structural Engineering</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Computer Science &amp; Engineering</li> <li>• Electronics and Communication Engineering</li> <li>• Civil Engineering :               <ul style="list-style-type: none"> <li>✓ Environment Engineering</li> <li>✓ Structural Engineering</li> </ul> </li> <li>• Chemical Engineering</li> <li>• Mechanical Engineering :               <ul style="list-style-type: none"> <li>✓ Manufacturing Technology</li> </ul> </li> </ul>
Integrated M.Tech	<ul style="list-style-type: none"> <li>• Computer Science &amp; Engineering</li> <li>• Electronics and Communication Engineering</li> <li>• Biotechnology</li> </ul>	X	X
M.Sc.	<ul style="list-style-type: none"> <li>• Mathematics</li> <li>• Physics</li> <li>• Microbiology</li> <li>• Environmental Biotechnology</li> <li>• Quantitative Economics</li> </ul>	<ul style="list-style-type: none"> <li>• Physics</li> <li>• Biotechnology</li> <li>• Bioinformatics</li> <li>• Statistics</li> </ul>	<ul style="list-style-type: none"> <li>• Chemistry</li> <li>• Mathematics</li> <li>• Physics</li> </ul>
M.B.A	M.B.A with major and minor specialization in across the following domains : Marketing            International Business Finance                Corporate Laws H.R                        Insurance Operations            Digital Marketing I.T                         Entrepreneurship Business Analytics    Banking Financial Services	X	X

# PG Programs

## M.Tech (2 Years)

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

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

The program provides advanced level education and research exposure in various areas of computing - Algorithms, Distributed Systems, Software Engineering, Machine Learning, Databases, Computer Networks, Computer Architecture, Information and Networks Security, Big data, Cloud Computing, Data analytics and IOT etc. These advanced level courses and M. Tech dissertation lay the foundation for potential doctoral work in CSE.

## M.Tech in CSE with specialization in Data Analytics (JIIT)

M.Tech (Data Analytics) is an inter-disciplinary program offered by Department of CSE & IT and is designed to meet the huge manpower shortage in this field. All business and government organizations working in commerce, policy, insurance, finance, economics, engineering, infrastructure, energy, health care, education, security, sports, media, culture, etc. are increasing relying on computational tools and techniques of data analytics for taking informed decisions.

This program has been designed to develop the ability to apply and develop computational techniques and systems to draw insights from big data in a variety of application domains. The curriculum exposes students with all aspects of data analytics including research design, data collection, preparation analysis, integration, visualization, and interpretation. In addition to CSE & IT Department, Departments of Mathematics, HSS as well as Business School will also contribute to this program.

The core courses include statistical data analysis, financial econometrics, data warehousing and data mining, pattern recognition and machine learning, large scale graph analytics, empirical research and laboratories. Students will also be offered several electives on theoretical, systemic, algorithmic and applied aspects of data analytics. This two year full

time program is open for candidates with B.Tech. (in any discipline) or Masters (in Computer Applications/ Computer Science/ IT/ Maths/ Statistics/ Operations Research/ Physics/ Electronics/ Instrumentation) or equivalent.



## M.Tech in CSE with specialization in Artificial Intelligence and Machine learning (JIIT)

M.Tech in CSE with specialization in Artificial Intelligence and Machine learning aims to focus on Machine Learning techniques to intelligently handle large and complex amounts of information build upon foundations in many disciplines, including statistics, knowledge representation, planning and control, databases, causal inference, computer systems, business and finance, machine vision and natural language processing etc. This program will provide students an opportunity to learn both foundational and experimental components of Machine Learning and Artificial Intelligence. The objective of this post graduate program is to develop the ability and skills to undertake careers involving development, innovation and problem solving using Artificial Intelligence and Machine Learning technologies. This two year full time program is open for candidates with B.Tech. (in any discipline) or Masters (in Computer Applications/ Computer Science/ IT/ Mathematics/ Statistics/ Operations Research) or equivalent.

## M.Tech in CSE with specialization in Internet of Things (IoT) (JIIT)

A new era of engineering, Internet of Things (IoT), has gained interest in last few years. IoT is a network of connected devices and people, which collects and communicates data from

environment around them. Applications of Internet of Things (IoT) are in smart agriculture, transportation, environment monitoring, healthcare, and smart wearable. M.Tech. program with specialization in IoT is especially designed for young innovators to provide them a breadth as well as depth for designing systems for the current era of IoT. The objective of this post graduate program is to produce skilled graduates with deeper understanding of IoT systems and ability to follow multi disciplinary approach for design, development, simulation, and implementation of IoT systems. This two year full time program is open for candidates with B.Tech. (in any discipline) or Masters (in Computer Applications/ Computer Science/ IT/ Maths/ Statistics/ Operations Research) or equivalent.

### **M.Tech in CSE with specialization in Information Technology & Entrepreneurship (JIIT)**

This is a joint program by Department of CSE&IT and Jaypee Business School. It is designed for graduates with IT background who are keen in pursuing information technology centric entrepreneurship or taking leadership positions in innovative technology-based start ups and other organizations. The curriculum includes courses on information technology and entrepreneurship management. Second year of the program is devoted to industrial internship and IT entrepreneurship project to develop an investor-ready business plan. Through this program, the student will also network with successful 'role model' innovators, entrepreneurs, and enterprise development experts. This two year full time program is open for candidates with B.Tech. (in any discipline) or Masters (in Computer Applications/ Computer Science/ IT/ Maths/ Statistics/ Operations Research/ Physics/ Electronics/ Instrumentation/management) or equivalent.

### **M.Tech in Electronics & Communication Engineering with specialization in Micro Electronic Systems & Internet of Things (JIIT)**

M.Tech. in Microelectronics & Internet of Things (MIoT) is designed to provide electronics engineers with highly specialized knowledge and experience that they need to design, fabricate and test devices, circuits and systems at micro scale.

The program offers a set of courses that allow students to gain expertise in areas that include back-end and front-end microelectronic designs such as processor and SoC design, chip design, etc. In addition, it introduces the basic IoT architectural overview, its design principles and needed capabilities and also concepts on real-world designs.

The program curriculum is divided into theory, laboratory practice and projects. Along with the core courses, there are several elective courses, audit courses, project based learning courses and open electives. The dissertation in the final year enables students to apply concepts and techniques learnt during the program. Keeping in view the market trends and demands, the core laboratories for VLSI design and simulation, Internet of Things, etc. have been established.

The aim of the program is to provide students a broad base of education and understanding about the semiconductor industry linked with IoT, enabling them lucrative opportunities in their future endeavors.



### **M.Tech in Electronics & Communication Engineering with specialization in Wireless Communication (JIIT)**

M.Tech in Electronics and Communication Engineering (ECE) with specialization in Wireless Communication (WC) encourages students to develop an in-depth theoretical and practical knowledge of advanced communication systems (4G, 5G and beyond).

The contents of the course are designed meticulously keeping in mind the demands of wireless and mobile industry. The stream also includes advanced concepts of optical wireless communication, microwave and millimeter wave communication, 4G and 5G antenna technology etc. along with basic telecommunication courses. The course is well supported by laboratories like Advance Communication Laboratory, Research Laboratory, with many software and hardware tools.

As per the university regulations, a student enrolled in the M.Tech in ECE (WC) is required to enroll in various core subjects, electives, labs, project based learning, seminars, and dissertation/Industrial Project. Duration of dissertation/ industrial project is of 2 semesters wherein the student applies the theoretical concepts learned to practical applications.

### **M.Tech in Electronics & Communication Engineering with specialization in Machine Learning and Signal Processing (JIIT)**

The M.Tech program in Machine Learning and Signal Processing is aimed at providing a deeper understanding of the mathematical, theoretical, practical, and application aspects of machine learning and signal processing and create professionals who are industry ready.

Machine Learning usually plays an important role in the transition from data storage to decision systems based on large database signals such as those obtained from sensor networks, internet services or communication systems. The program will focus upon machine learning methods and their applications to signal processing. The curriculum comprises of subjects like introduction to machine learning, advance signal processing, optimization techniques, statistical signal processing, image and video processing, advanced topics in machine learning, computer vision, biomedical signal processing, speech and audio processing, fuzzy logic, python, data analysis, and algorithms.

In first year, students are introduced with various theory and laboratory courses followed by a research based Dissertation/ Industrial Project spread across third and fourth semesters. Thus, the students are having deeper knowledge of signal processing area and its implementation with machine learning. are fully equipped to undertake research and development, work in academia or in industrial environment.

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

The M. Tech program in Biotechnology is designed to generate trained manpower in biotechnology equipping them with knowledge and hands-on skills in cutting edge biotechnological areas as diverse as Functional and Evolutionary Genomics, Proteomics,

Drug Target Discovery, Regulatory Affairs, Microbial Biodiversity/Bioremediation, Bioprocess Technology, Nano-biotechnology, Product Development in Biotechnology and Intellectual Property Rights (IPR) in Biotechnology etc. The theory courses are supported by hands-on skills through appropriately designed laboratory experiments and further strengthened by mandatory Project Based Learning, Term Paper/Seminar along with a yearlong research project and industrial training.



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

The program provides preparation for effective leadership in the field which includes light (residential and small office buildings) and heavy (large office buildings and facilities, infrastructure) projects. It aims at educating the students with regulatory, insurance, management, safety, planning tools, estimation and environmental aspects of management necessary for overall planning and control of construction projects. The course helps in gaining innovative problem-solving skills to determine costs and apply time-value-of-money concepts to effectively evaluate alternatives. With a curriculum developed in collaboration with the University of Florida (USA), the programme assures relevant and global standards of education



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

This course is designed for students who wish to specialize in structural engineering. The program emphasizes analysis and design of structures like bridges and multi-storied buildings. The course introduces numerically demanding research and design exercises relating to a wide-range of structures using simulation, modeling and computational software programs. The program lays equal emphasis on laboratory work, industrial visits and research based dissertation. M. Tech. program in Structural Engineering provides a basic preparation for professional careers and an understanding of design, comprehension of the commercial world and competence in transferable skills.



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

The interdisciplinary program is aimed at imparting advanced level education in Environmental Science and Engineering for analyzing and controlling environmental pollution and develop control technologies and management practices for sustainable development. The course offers a wide variety of electives in areas like clean technologies, membrane separation processes, resource conservation, water quality management and solid waste management.

#### 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 Chemical Engineering (JUET)

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



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

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

# M.Sc. Programs

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

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

The department of Physics and Materials Science and Engineering (PMSE) is offering a two year M. Sc. program in Physics. The course curriculum of M. Sc. Physics is designed with an objective to provide knowledge and skills in Physics suitable for a professional career in academics, R&D and doctoral studies in Physics/Applied Physics.

The curriculum follows choice based credit system (CBCS) with the option of advanced study and training in two specializations: Solid State Physics and Optoelectronics. This program is of four semester duration. 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 equipments.



## 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 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.

## M.Sc in Microbiology (JIIT)

M.Sc. Microbiology is a full-time credit-based 2-years program run by the Department of Biotechnology. The curriculum has been designed with a balanced mix of basic and advanced theory and practical courses with the aim to keep students abreast of the latest advances in the field. Core and optional subjects in various fields of microbiology and allied areas such as Microbial Genetics and Molecular Biology, Environmental Microbiology, Enzymes & Bioprocess Technology, Medical Microbiology, Food & Dairy Microbiology, Recombinant DNA Technology, Bioinformatics & Omics, Vaccine Biology, Probiotics & Prebiotics, Microbial Technology, Metagenomics and Microbiomics provide in-depth knowledge. Students are provided hands-on skills in the planning, experimentation and data analysis in the Laboratory courses. Course on soft skills provides them the training to present their work effectively. The final semester provides the base to hone their research skill in dissertation work and present their research findings. With the well-designed courses, the program aims to make the students ready for research, industry and entrepreneurial endeavors.

## M.Sc. Environmental Biotechnology(JIIT)

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

Biotechnology-based solutions can be a sustainable and eco-friendly approach for finding cost-effective measures. Microorganisms and plants are being used for bioremediation of environmental pollutants and commercially available technologies have proven to be safe and effective. 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 two-year M.Sc. program has courses pertaining to basics-to-application of existing and emerging biotechnological tools for the process development and reducing or mitigating the impact of environmental pollutants. The program prepares students for a career in industry, academia and entrepreneurship, both in public and private sectors.

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

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

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

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

M.Sc. Biotechnology is a full-time credit-based 2-years program of four semesters run by the Department of Biotechnology and Bioinformatics. The curriculum has been designed to impart basic and advance knowledge of concepts and applications of Biotechnology in various domains e.g. Industry and Bio-processing, Medical, Healthcare, Agriculture and Environment. Students are provided enough 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.



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

M.Sc. Bioinformatics is a full-time credit-based 2-years program run by the Department of Biotechnology and Bioinformatics. In this M.Sc. program, theory and Laboratory work are combined from various fields of science such as Mathematics, Computer Science and Biology. The program provides foundational skills in Bioinformatics with specialist skills in Computing, Programming, Molecular Biology and Research methods. It is a multidisciplinary research-based degree, designed for applicants with a Biological, Biomedical, Computational or Mathematical background. The aim of this program is to provide individuals with a platform to explore, analyze and interpret contemporary biological data. This program has been designed for the needs of Academic Research, Biotechnology, Pharmaceutical and Health Care Industries. Completion of the course is aimed to provide a successful career in the Bioinformatics industry or academia.

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

M.Sc. Statistics is designed to develop student's knowledge to identify and apply major statistical tools. The program focuses on theoretical, computational and applied aspects. The aim of the program is to foster an interest in fundamental and applied statistics and research, which enables the students to pursue their future careers either in the academics, insurance firms or analytics industry. Besides the usual course curriculum, it also involves one-year project work which would enable students to become professional statisticians. After successful completion of the program, students may opt for jobs in government sectors and reputed private organizations.



# MBA Programme at Jaypee Business School (JIIT)

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

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

members, industry professionals, alumni, students and academic professionals from reputed organizations.

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

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

To ensure that our management graduates are not only adept at using technology for making decisions but are also able to understand how to advance their knowledge across multiple technologies, JBS has introduced Technology in Management courses in the core areas. Courses on Internet of Things, Artificial Intelligence in business, Integration of Information Systems in Business are part of the core curriculum.

In addition, through courses such as Data Visualization, Analytical and Technical Skills (Lab) and Data Analytics for Business Decisions, JBS ensures that students learn to design and implement database management system.



# 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, Micro-electronics, Internet of Things, VLSI design, Embedded Systems, RF and Microwaves.	Signal Processing, Speech Processing Image Processing, Filters, Embedded System Design, Mobile & Wireless Communication, Error Control Coding, Biomedical Engineering, Control Systems, Net Worked Control Systems, R.F. & Microwave Engineering	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.	Parallel and Distributed Computing, Mobile Computing, Cloud Computing, Computer Networks, Wireless Sensor Networks, Forensics, Security, Software Engineering, Image Processing, Computer Vision, Data Mining & Warehousing, Information Retrieval, performance of Algorithms, Artificial Intelligence, Natural Language Processing.	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.
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, Microbial Biotechnology, Plant biotechnology, Industrial biotechnology, Environmental Biotechnology, Food Technology, Computational Biology, Natural Products as Drugs and Nutraceuticals, Computational Drug Discovery, Medicinal Chemistry, Neuro Pharmacology, Stem Cells, Infectious Diseases, Cancer Biomarkers.	

Program	JIIT-Noida	JUIT-Waknaghat	JUET-Guna
Physics & Materials Science and Engineering	MEMS and Smart Systems, Advanced Materials, Nanoscience and Nanomaterials, Quantum Optics & Computing, Atomic & Molecular Physics, Energy Materials and Devices, Photonics and Plasma Physics, Semiconductors.	Semi Conducting Chalcogenides, Nanoferrites, Microstrip Antennas, Nanoscience and Nanotechnology, Polymers, Nano-sensors.	Spectroscopic Studies of Polymers and Finite Crystals, Nanomaterials, Energy Storage Devices, Nonlinear Dynamics and Quantum Optics.
Mathematics	Fractals & Chaos, Mathematical Analysis, Numerical Analysis, Computational Continuum Mechanics, Fuzzy set theory, Information Theory, Soft Computing, Image Processing, Optimization Techniques.	Differential Equations, Mathematical Modeling and Simulation, Elasticity, Wave Propagation, Fuzzy Information Theory and Decision Making, Differential Geometry, Algebraic Coding Theory Statistics, Statistical Inference.	Fluid Mechanics, Information Theory and its Applications, Fuzzy Sets and logic & Fuzzy Information Measures.
Humanities and Social Science	Political Sociology, Anthropology; Psychology, Public Finance, Development & Health Economics; Financial Accounting and Evaluation, Corporate Finance, Banking; Indian literature, Organizational Behaviour, HR Information System, Emotional Intelligence, Social Media & E Marketing.	Finance, Economics, Management, English, Marketing Management, Human Resource Management.	Human Resource Management & Behavioral Studies, Economics and Human Behavior at work place, E-Commerce, Marketing Management, Communication at work place
Civil Engineering		Rock Mechanics, Geotechnical Engineering, Fluvial Hydraulics, Environmental Engineering, Concrete Technology, Transportation Engineering.	Concrete Technology, Geotechnical Engineering, Hydraulics & Water Resources Engineering, Transportation Engineering, Environmental Engineering.
Chemical Engineering			Recovery of Metals from Industrial Wastes, Foam fractionation & Control of Volatile Organic Compounds.
Mechanical Engineering			Dynamics of Machine Tools, Machine Design and Vibration Analysis, Condition Monitoring and Fault Diagnosis of Machine Tool Structures, Analysis of Machine Tools, CAD/CAM, Advanced Manufacturing Processes, Computational Fluid dynamics, Heat and Mass Transfer, Refrigeration and Air Conditioning, Solar thermal Applications, Renewable Energy and Solar Water Desalination.
Chemistry			Novel Surfactants, Polymer Chemistry, Oleo Chemicals, Environmental Sciences, Natural Products.
Management	Marketing, Finance, Operations and Supply Chain Management, Economics and International Business, Human Resource Management and Organizational Behavior.		

# Student Hub (Clubs) Activities

In addition to academic pursuits, extracurricular activities make up a valuable part of the University experience. The students can develop their social and interpersonal skills by participating in various student hubs. These help students acquire traits like team work, sportsmanship and leadership. These clubs are operated by students under a Faculty Member and they organize events of multifarious dimensions which keeps the Campus vibrant.

## Hubs(Clubs) at JIIT

Creativity and Innovation Cell in Electronics

It's Our Earth

Adwitya – Services to specially-abled persons

Jhankaar – The Dance Hub

KNUTH Programming Hub

Arkasm Society – Theatre Hub

Graficas – Graphics and Animation Hub

Expressions – The painting Hub

PageTurner Society



Microcontroller Based Systems and Robotics Hub

Kalakriti – The Rangoli Hub

Cresendo – The Music Hub





FORTISSMO – The Music Hub  
 ABHIYAKTI – Street Play  
 EBULLIENCE – Fresher's Welcome Event  
 CONVERGE – Annual Technical-Cultural-Sports festival



### Hubs (Clubs) at JUIT

Diksha – Cultural and Musical Hub  
 Parakram – Sports Club  
 Model United Nations  
 Halla Bol – Nukkad Natak  
 Le Fiestus – Cultural Club  
 Murious – Technical, Movie and photographic Club

### Hubs(Clubs) at JUET

Programming and Development Club  
 UI/UX Club  
 BotNet Club  
 AR/VR Club  
 Bitwise: Programming Hub  
 Mozilla Phoenix Club  
 IETE – Student Forum  
 ASME – Student Section  
 ICI – Student Chapter  
 JCE – Student Society  
 CEF – Student Society

# 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. Three NSS units of 100 students each have been sanctioned, of which one unit has been set up in Sector 62 and another in Sector 128. Currently, there are approximately 400 NSS student volunteers actively engaged in social service.

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

## Unnat Bharat Abhiyan (UBA) (JIIT)

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

Motivation by the vision of Gandhi ji of self-sufficient 'village republics', Govt. of India has set its vision of holistic development of villages.

Under this vision, rural areas need to be developed with local resources (both material and manpower), eco-friendly technologies so that the basic need of food, clothing, shelter, sanitation, health care, energy, livelihood, education etc. are locally met. The main aim of Unnat Bharat Abhiyan is to enable faculty and students of the institution to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth of adopted villages.

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

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

## Swachh Bharat Abhiyan (SBA) (JIIT)

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 is also a part of this movement. The institute participates in various activities suggested by MHRD i.e Swachh Bharat Summer Internship Program, Swachhata Hi Sewa Campaign etc. The students of JIIT Noida are involved in Information-Education-Communication activities, Solid Waste Management related activities under Swachh Bharat Abhiyan.



# 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 our campuses, namely JIIT Noida, JUIT Waknaghat, JUET Guna, Jaypee University Anoopshar and Jaypee Business School. 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.

It gives us tremendous satisfaction that our Placement is improving every year after year, which are bound to improve further in the years to come. The highest salary package offered till now for 2020 batch is 43.17 LPA. Amazon has offered a salary package of 28 LPA. For the 2020 batch, Amazon group of Companies recruited 55 students. Companies like Google, Morgan Stanley, Deloitte, Nestle, SAP Labs, EY, Samsung, ZS Associates visited the campus for 2020 batch and recruited students. 54 other companies visited and have offered salary package of 6 LPA & above.



### PLACEMENT STATUS : JIIT, NOIDA 2014-18 B.Tech

Branch	Total Participating Students	Total No. of Offers	% of Total Offers	Absolute offers	% of absolute offers
CSE	402	444	110%	391	97%
ECE	225	203	90%	186	83%
IT	42	42	100%	40	95%
BT	32	21	66%	21	66%
<b>Total</b>	<b>701</b>	<b>710</b>	<b>101%</b>	<b>638</b>	<b>91%</b>

### PLACEMENT STATUS : JUIT, SOLAN 2014-18

Branch	Total Participating Students	Total No. of Offers	% of Total Offers	Absolute offers	% of absolute offers
CSE	134	116	87%	107	80%
ECE	58	30	52%	30	52%
IT	36	25	69%	22	61%
BT/BI	44	5	11%	5	11%
CIVIL	61	3	5%	3	5%
<b>Total</b>	<b>333</b>	<b>179</b>	<b>54%</b>	<b>167</b>	<b>50%</b>

### PLACEMENT STATUS : JUET, GUNA 2014-18 as on 26 June 2018

Branch	Total Participating Students	Total No. of Offers	% of Total Offers	Absolute offers	% of absolute offers
CSE	133	102	77%	94	71%
ECE	27	15	56%	11	41%
MECH	69	31	45%	20	29%
CHEMICAL	3	2	67%	2	67%
CIVIL	50	24	48%	14	28%
<b>Total</b>	<b>282</b>	<b>174</b>	<b>62%</b>	<b>141</b>	<b>50%</b>

### PLACEMENT STATUS : JIIT, NOIDA 2015-19 B.Tech

Branch	Total Participating Students	Total No. of Offers	% of Total Offers	Absolute offers	% of absolute offers
CSE	479	734	153%	470	98%
ECE	320	474	148%	304	95%
IT	50	76	152%	48	96%
BT	47	40	85%	36	77%
<b>Total</b>	<b>896</b>	<b>1324</b>	<b>148%</b>	<b>858</b>	<b>96%</b>

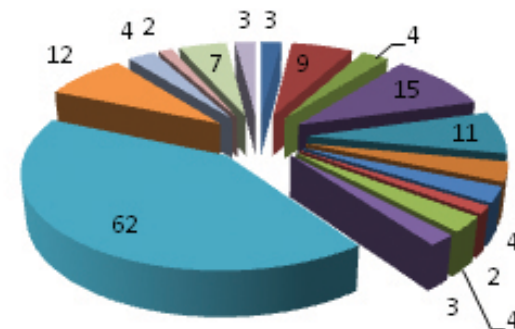
### PLACEMENT STATUS : JIIT, SOLAN 2015-19

Branch	Total Participating Students	Total No. of Offers	% of Total Offers	Absolute offers	% of absolute offers
CSE	160	231	144%	152	95%
ECE	69	77	112%	65	94%
IT	22	31	141%	20	91%
BT/BI	30	27	90%	24	80%
CIVIL	46	21	46%	18	39%
<b>Total</b>	<b>327</b>	<b>387</b>	<b>118%</b>	<b>279</b>	<b>85%</b>

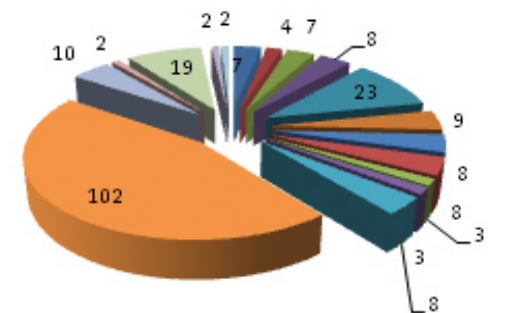
### PLACEMENT STATUS : JUET, GUNA 2015-19 as on 26 June 2018

Branch	Total Participating Students	Total No. of Offers	% of Total Offers	Absolute offers	% of absolute offers
CSE	192	258	134%	189	98%
ECE	14	16	114%	12	86%
MECH	44	39	89%	29	66%
CHEMICAL	5	8	160%	5	100%
CIVIL	31	32	103%	28	90%
<b>Total</b>	<b>286</b>	<b>353</b>	<b>123%</b>	<b>263</b>	<b>92%</b>

### Sectoral Distribution - Final Placement B. Tech 2018 Graduating Batch



### Sectoral Distribution - Final Placement B. Tech 2019 Graduating Batch





# Recruiting Companies in 2019

S. No.	Company	Sector
1	Asahi India	Automobile
2	Contential Engine	Automobile
3	Indusrty Buying	Automobile
4	Keyence India	Automobile
5	Paytm Bank	BFSI
6	HSBC	BFSI
7	Indialends	BFSI
8	Estee Advisors	BFSI
9	S&P Capital IQ	BFSI
10	Tresvista	BFSI
11	XL Catlin	BFSI
12	Dilip Buldcon	Construction
13	HDD Infrastructure	Construction
14	Hercules	Construction
15	Sanmar Group	Construction
16	SRM Contractors	Construction
17	Gulshan Homz	Construction
18	HMS Infratech private limited.	Construction
19	Nivesh Global	Construction
20	Crowe Horwath	Consulting
21	Deloitte (India)	Consulting
22	Deloitte (USI)	Consulting
23	EY	Consulting
24	WSP	Consulting
25	ZS Associates	Consulting
26	Acxiom Consulting	Consulting
27	Bridgcon India	Consulting
28	Evalueserve	Consulting
29	Hitachi	Consulting
30	Kronos	Consulting
31	Lakshmikumaran	Consulting
32	Mattsenkumar	Consulting
33	Mckinley	Consulting
34	Protivity	Consulting
35	PS Bedi	Consulting
36	Reliance Industries	Consulting

S. No.	Company	Sector
37	Square Yard	Consulting
38	TT Consultants	Consulting
39	Zunroof	Consulting
40	Glorious Insight	Consulting
41	Untrodden Labs	Consulting
42	VK Publication	Consulting
43	Urban Clap	E-Commerce
44	Amazon	E-Commerce
45	IndiaMart	E-Commerce
46	MagicPin	E-Commerce
47	MapMyIndia	E-Commerce
48	Pooraa	E-Commerce
49	Prime Seller Hub	E-Commerce
50	Twango	E-Commerce
51	Moglix	E-Commerce
52	Edoofa	Education
53	Collegedunia	Education
54	Sixred Marbles	Education
55	SNVA	Education
56	Studypad	Education
57	ToppScholars	Education
58	Eleation	Education
59	GrownMind	Education
60	Byjus	E-Learning
61	Classplus	E-Learning
62	ExtraMarks	E-Learning
63	Acadecraft	E-Learning
64	Byjus (JUIT)	E-Learning
65	Chapter Vitamins	E-Learning
66	Eckovation	E-Learning
67	Interview Bit	E-Learning
68	Inalsa	Electronics
69	Broadcom	Electronics
70	Rohde & Schwarz	Electronics
71	Samsung	Electronics
72	ST Microelectronics	Electronics

S. No.	Company	Sector
73	Torrent Group	Electronics
74	Vivo India	Electronics
75	Adani Wilmar	FMCG
76	Nestle India	FMCG
77	Nirma	FMCG
78	Octro	Gaming
79	PlaySimple Games	Gaming
80	Fan Fight	Gaming
81	Credihealth	Healthcare
82	Root Analysis	Healthcare
83	1MG	Healthcare
84	IDS InfoTech	Healthcare
85	Innovaccer	Healthcare
86	Pragati	Healthcare
87	Raj Nakra	Healthcare
88	Zyla Healthcare	Healthcare
89	Newgen Software	IT
90	Kratikal	IT
91	10Times	IT
92	Abyeti technologies	IT
93	Adobe	IT
94	Cadence	IT
95	Cognizant	IT
96	Collabera	IT
97	FICO	IT
98	Finsol Tech	IT
99	Gemalto	IT
100	Grapecity	IT
101	Grappus	IT
102	Hashedin	IT
103	Infosys	IT
104	Mentor Graphics	IT
105	Mtree Software	IT
106	Nirvana	IT
107	NTT DATA	IT
108	Posist	IT

S. No.	Company	Sector
109	SAP Labs	IT
110	Vehant Tech	IT
111	Wipro	IT
112	Zycus	IT
113	Accolite Software	IT
114	Amazon SDE	IT
115	Aptara Corporation	IT
116	BlogVault	IT
117	Bright Petroleum	IT
118	Clappia	IT
119	Click Labs	IT
120	CodeNation	IT
121	Cognizant Next Hiring	IT
122	Coriolis Technologies	IT
123	Coviam	IT
124	Cvent	IT
125	Cyware	IT
126	Daily Hunt	IT
127	Epam	IT
128	Fundwave	IT
129	GenPact	IT
130	Godrej Info Tech	IT
131	Gradeup	IT
132	Hackwith Infy (SE)	IT
133	Hackwith Infy (SEP)	IT
134	Hackwith Infy (SP)	IT
135	HCL Tech	IT
136	Hyperdart	IT
137	Iboss	IT
138	IIMjobs	IT
139	Indus Valley	IT
140	Infogain	IT
141	Ingenious	IT
142	Intellicus	IT
143	Interra	IT
144	Josh Technologies	IT
145	Knoldus Software	IT
146	Kony	IT
147	Kuliza	IT
148	Kwench	IT

S. No.	Company	Sector
149	Lucideus Tech	IT
150	Maxtra Tech	IT
151	Mountblue	IT
152	Mphasis	IT
153	MyGate	IT
154	MyOperator	IT
155	NCR Corporation	IT
156	NIIT Tech	IT
157	Nineleaps	IT
158	Optimus	IT
159	Piggy	IT
160	QA Info Tech	IT
161	Redian Software (CSE)	IT
162	Samisthi Info Tech	IT
163	Sixer Class	IT
164	Sportskeeda	IT
165	Squad	IT
166	Sterlite Tech	IT
167	Tech Mahindra	IT
168	United Health	IT
169	Velocity Software (CS/ECE)	IT
170	Vidooly	IT
171	Vitrana	IT
172	Vmware	IT
173	Wake Up	IT
174	Wayforward	IT
175	WebBee	IT
176	WeP Digital	IT
177	Wheelseye	IT
178	Wipro (JUET)	IT
179	Xane	IT
180	Yamaha Motor	IT
181	Zscaler	IT
182	Abhidhya Tech	IT
183	Ecolab	IT
184	Holostik	IT
185	RxLogix	IT
186	Hike Messenger	IT
187	Roposo	IT
188	AWS	IT

S. No.	Company	Sector
189	Freyr solutions	ITES
190	RTDS	ITES
191	Birchstreet System	ITES
192	Exponential	ITES
193	InfoEdge/Naukri.com	ITES
194	Publicis Groupe	ITES
195	Real Time Data Services	ITES
196	RMS	ITES
197	Skill Lotto	ITES
198	University Living	ITES
199	Delhivery	IT
200	UltraTech	Manufacturing
201	Aquaviva (Bath Line India)	Manufacturing
202	HT Media	IT
203	Crisp Analytics	Research
204	iMARC Research	Research
205	Black Olive (Civil)	Research
206	P&S Research	Research
207	Phronesis Partners	Research
208	Apelo Consulting	Research
209	Growisto	Research
210	Growman	Research
211	Phronesis Partners (BR)	Research
212	Smartanalyst	Research
213	Tech Sci Research	Research
214	The Smart Cube	Research
215	Unimrkt	Research
216	Value Research	Research
217	Yacca lifesciences pvt. Ltd.	Research
218	Dynata	Research
219	Universal DATA	Research
220	Grail Research	Research
221	Research Nester	Research
222	Airtel	Telecommunication
223	Ericsson	Telecommunication
224	OLA	Travel
225	Traveloka	Travel

# Students Support Systems

**Medical Facilities** – A dispensary 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.



**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.



**Other Facilities** – On campus ATM, Laundry services, Wifi enabled hostels, Annapurna, CCTVs at strategic locations for security, Photocopier outlet, Laundry, Swimming pool, Temple, Guest House etc.





# Jaiprakash Sewa Sansthan

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

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

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

JSS has translated its social responsibility into 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.



# Jaypee Group at a Glance

Transforming challenges into opportunities has been the hallmark of the Jaypee Group ever since its inception five decades ago. The Group is a diversified infrastructure conglomerate with business interests in Engineering & Construction, Cement, Power, Real Estate, Expressways, Fertilizer, Hospitality, Healthcare, Sports, Information Technology and 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. The Group is the only integrated solution provider for Hydropower projects in the country with a track record of strong project implementation in different capacities.



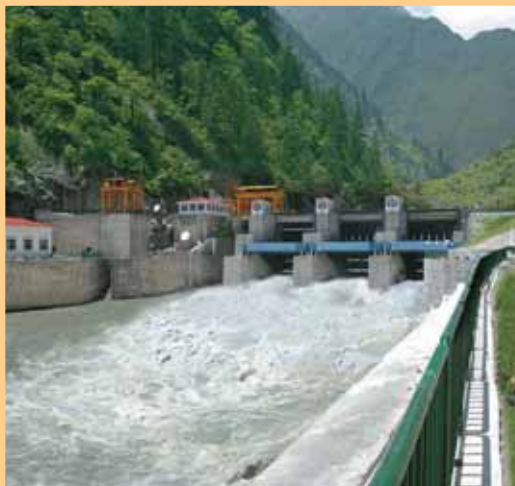
## Cement

The Group is a major cement producers in the country. Its cement division currently operates modern and, computerized process in its cement plants.



## Power

The Group operates 400MW Vishnuprayag hydropower plant in Uttarakhand , 1320 MW pit head based Nigrie Thermal Power plant in district Singrauli of M.P. and 500 MW Thermal Power plant at Bina M.P.  
1980 MW Bara Thermal Power project (Phase 1) in U.P.



## Real Estate

Jaypee Group is a pioneer in the development of India's first golf centric Real Estate. Jaypee Greens - a world class fully integrated complex at Greater Noida consists of an 18 hole Greg Norman Golf Course, stretching over 452 acres. It also includes residences, commercial spaces, corporate park, entertainment and nature in abundance. India's First Wish Town at Noida is an integrated township spread over 1162 acres of land comprising one 18 hole and two 9 hole golf facility and world class residences.



## Expressways

The Group constructed Yamuna Expressway project - a 165 km access controlled 6 lane super expressway along the Yamuna river connecting Noida and Agra on Build Own-Transfer basis. The Group also constructed four laned Zirakpur-Parwanoo Section of NH-5.

The Group has commissioned the first RIFD Technology based Electronic Toll Collection Plaza.



## Fertilizers

The fertilizer plant situated in Panki, Kanpur is one of the oldest Urea manufacturing plants in the country with an installed capacity of 7.22 lac MT per annum. Urea production has started from June 2013 and the product is sold in the brand name of "Jaypee Chand Chaap Urea" which enjoys a very high degree of acceptance amongst the farming community. The plant was successfully converted to gas based, from Naptha and currently prills urea by using the latest in technology.

The company has also entered into the value added agri inputs space by marketing speciality inputs like Micro nutrients, Zinc sulphate Mono hydrate and organic manure under the flagship brand of Jaypee Chand Chaap.



## Healthcare

With the vision of promoting world-class health care amongst the masses by providing quality and affordable medical care with commitment, the Jaypee Hospital has been set up and the first phase with 525 beds is fully operational. The hospital has been planned as a 1200 bedded tertiary care multi-speciality facility.



## Hospitality

The Group owns 4 Five Star Hotels, two in New Delhi and one each in Agra and Mussoorie with a total capacity of 644 rooms. Another 5 Star luxury with 170 rooms state-of-the-art resort and SPA is now operational in collaboration with SIX SENSES at Greater Noida.



**2020 Admission Shall be based on:**

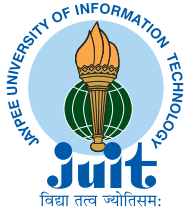
**(a) JEE-2020 All India Ranking (JIIT, JUIT & JUET)**

**(b) 10+2 marks based merit (JUET & JUIT )**



**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 Fax: +91-120-2400986 Website: [www.jiit.ac.in](http://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. Wagnaghat - 173234, Distt. Solan (H.P.)  
Tel: 01792- 257999, 245371 Fax: 01792-245362 Website: [www.juit.ac.in](http://www.juit.ac.in)  
Mobile: 7807846047, 7807846048, 7807846049, 7807846050



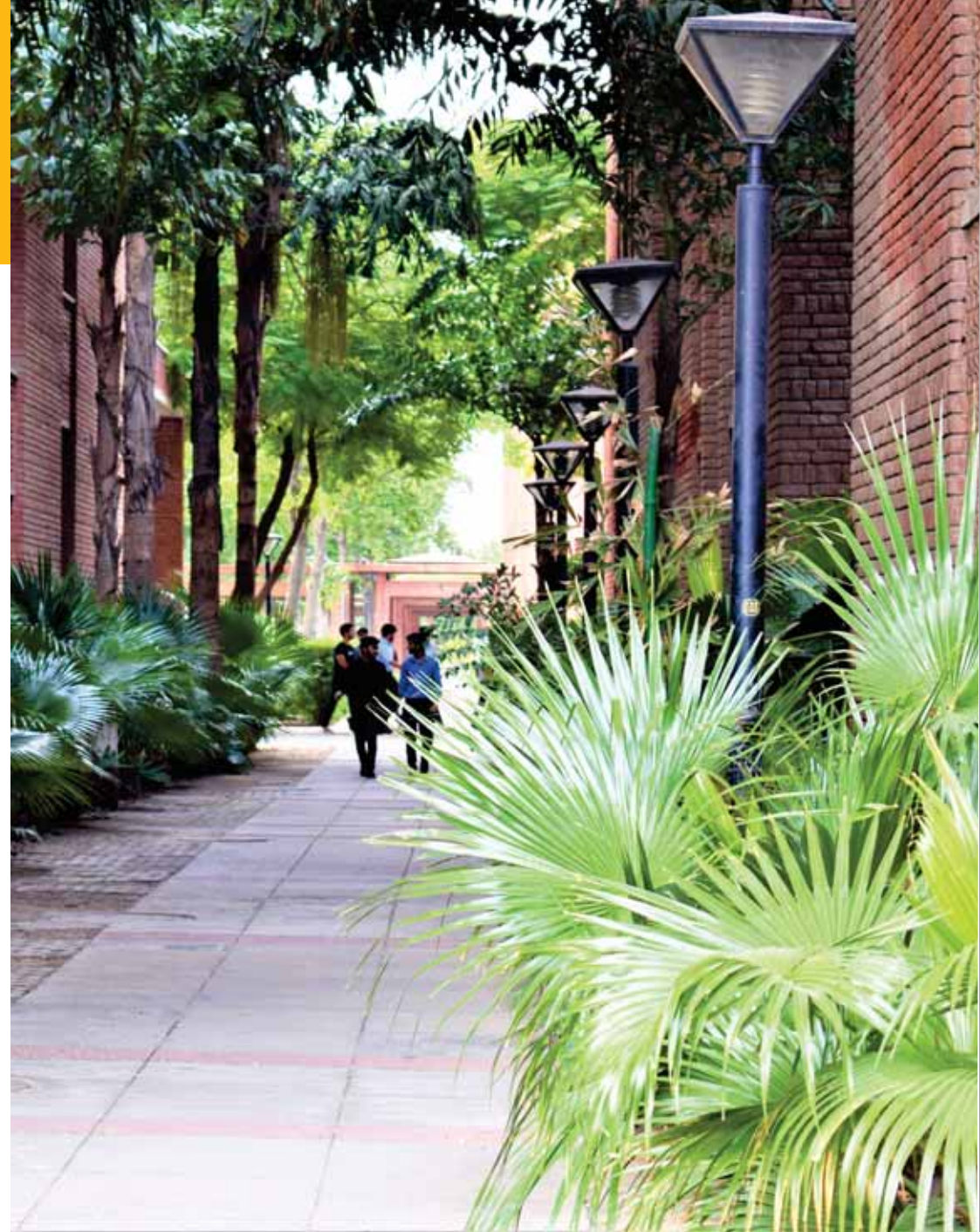
**JAYPEE UNIVERSITY OF ENGINEERING & TECHNOLOGY,  
GUNA, M.P.**

(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 Fax: 07544-267011 Website: [www.juet.ac.in](http://www.juet.ac.in)



**JAYPEE UNIVERSITY,  
ANOOPSHAHR**

(Established under Govt. of Uttar Pradesh Act No. 8 of 2014)  
Aligarh Road, Anoopshahr-203390, Distt. Bulandshahr, Uttar Pradesh  
Mobile: 7055922777, 7055922888, Websites: [www.jaypee.ac.in](http://www.jaypee.ac.in)



**For admission enquiries write to [admission@jiit.ac.in](mailto:admission@jiit.ac.in)**