



## **ADMISSION PROCESS FOR MTech PROGRAMME**

**Academic Session: 2024-25**

### **1. JUIT AT A GLANCE:**

Jaypee University of Information Technology, Wagnaghat was established as the first State Private University of Himachal Pradesh vide Extraordinary Gazette Notification in May 2002.

The University is spread over 25 acres of lush green pollution free environment with a built-up area of 74372.56 sq.m. comprising the Academic Block (with lecture theatres, classrooms, tutorial rooms, laboratories, administrative and faculty offices and the library), Hostel residences for boys and girls, faculty residences, guest house, Annapoorna (Mess), auditorium, sports facilities, 5 Gyms, bank with ATM, dispensary, helipad, university bus, laundry and other associated services. At present, boys and girls hostels can accommodate upto 1800 students. The hostel for girls is separate. The campus is fully wifi, with 24x7 electric supply and power back up. NCC is available for volunteer students. The medium of instruction in JUIT is English.

Jaypee University of Information Technology (JUIT), Wagnaghat offers two years programs leading to the award of the Master's Degree in Technology, (MTech). The MTech programs attract the best student talent for higher studies with an aim that students can learn to interact with the professional world. MTech programs are available in various specializations. Department of Biotechnology and Bioinformatics offers MTech program in Biotechnology, Department of Civil Engineering offers MTech programs Civil Engineering with specializations in Construction Management, Environmental Engineering and Structural Engineering. Department of Computer Science & Engineering and Information Technology offers MTech in Computer Science and Engineering, MTech in Computer Science and Engineering with specialization in Information Security and Computer Science and Engineering with specialization in Data Science. Department of Electronics and Communication Engineering offers MTech program in Electronics & Communication Engineering, Electronics and Communication Engineering with specialization in Internet of Things. JUIT Wagnaghat provides a learner-centric academic environment to its students. It aims to instil in students the capability to deploy appropriate technology paradigms for given tasks, explore new technologies and lead teams to solve complex problems.

The MTech programs include compulsory core courses, elective courses and intensive dissertation in the respective area of specialization. Through compulsory core courses the students acquire a state-of-the-art advanced knowledge in a chosen MTech program. The elective courses provide an opportunity to further specialize in the field depending on his/her interest and future career plans. For dissertation, students are required to take up problems on a particular topic in the field to focus their study and work. They are required to submit a dissertation/ report at the end of the dissertation. MTech. dissertation usually enables students to publish their results. Seminars are also part of the MTech curriculum for which students collect material on specific current topics and make presentations.

## 2. OVERVIEW OF DEPARTMENTS:

- a) **BIOTECHNOLOGY (BT) & BIOINFORMATICS (BI):** Current developments in biological sciences have created a niche for “Bioeconomy” through research and innovation in biological sciences complemented by physical, chemical, engineering and information technologies to create economic activity and public benefit. Department of Biotechnology & Bioinformatics is one of the leading departments of JUIT among private education institutions in the country with a mission of crafting of Biotechnology and Bioinformatics professionals with leadership quality in technology, creativity, innovation, and entrepreneurship. This mission is to achieve through best practical approaches in teaching and research. The department is known for its quality education in area of Biotechnology and Bioinformatics due to its strong R&D program, up-to-date educational curricula, modern laboratory infrastructure, highly qualified faculty, IPR & patents, and placements of graduates in various leading companies in India and abroad. The department strives to harness human capital for sustainable competitive edge in the field of Biotechnology and Bioinformatics.

[For more information about Department click here](#)

**MTech in Biotechnology:** The MTech in Biotechnology program is designed to offer courses covering diverse and extensive aspects of Biotechnology and Life Sciences with strong emphasis on research. It encompasses streams such as Metabolic Engineering, Bioprocess Engineering, Molecular Biology of Infectious Diseases, Microbial Technology, Industrial Enzymes and Protein Engineering; Plant Cell Culture Technologies, Bioremediation, Food Technology & Probiotics, Biosynthetic Pathway Discovery and Gene Function, Genomic, Proteomic and Metabolomic Technologies, etc. Curriculum is enriched to help students to fulfill their research aspirations and current industrial demands. Working along with a blend of Ph.D. scholars and research fellows involved in intense research enhances the quality of research experience for MTech students.

- b) **CIVIL ENGINEERING (CE):** The Department provides a vibrant educational environment to the students in the competitive field of Civil Engineering keeping in view the emerging infrastructural needs of the country as well as the emphasis on IT-enabled Civil Engineering profession. The Undergraduate curriculum of Civil Engineering (CE) and Civil Engineering with Computer Application (CEC) at JUIT Waknaghat have been developed to meet the latest requirements of the infrastructural development of our country which emphasizes the basic, advance and software orientated Structural Engineering, Construction Management, Environmental Engineering, Surveying, Geotechnical Engineering and Transportation/Highway Engineering. Apart from Classroom learning, emphasis is given to perform experiments in Laboratories, Project Work and preparation for various Competitive exams like GATE, ESE and other State Govt. Exams. Students are exposed to construction industry environment during the practical training in reputed construction companies including Jaypee Group, Larsen & Toubro, NHA, CBRI, AIMIL, Tata Projects, S.P. Singla, GRIL, JMC, and H.G. Infra. Training on software like STAAD Pro, MATLAB, Auto-CAD, REVIT, MS-Project, Primavera, OpenSees, Geo5, ABAQUS, Plaxis 2D and 3D enhances employability of students in the field of Conventional Civil Engineering and the evolving software based Civil Engineering. The Department also has ample presence in consultancy projects in nearby areas due to its best-in-class laboratories. Additionally, the department pursues

active research groups in several research thrust areas of Civil Engineering like Ground Improvement, Slope Stability, Construction Materials, Municipal Solid Waste Management and Sustainable Highway materials. The department aims at providing state-of-the-art skills and knowledge in multi-disciplinary and multi-domain operations to the students preparing them as leaders and highly sought after professionals in the world of Civil Engineering and Computer oriented Civil Engineering.

[For more information about Department click here](#)

**MTech Civil Engineering (Construction Management):** The program is focused at learning Project Planning, Schedule and Cost Assessment and preparation of Detailed Project Report (DPR) for major projects. The course aims at learning the regulatory, insurance, management, safety, planning tools, estimating and environmental aspects of construction management necessary for overall planning and control of a project. The program is endeavored to make the student achieve the leadership skills to lead construction projects.

**MTech Civil Engineering (Environmental Engineering):** The interdisciplinary program is aimed at imparting advanced level education in Environmental Science and Engineering, for Analyzing and Controlling Environmental Pollution, Control Technologies, Management Practices and 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.

**MTech Civil Engineering (Structural Engineering):** The program relates to imparting in-depth knowledge in Structural Analysis and Design of Tall Buildings, Pre-Stressed and Composite Structures and Blast Resistant Design of Structures through advanced level of learning in addition to training on structural software. The program offers wide variety of core courses in Structural Engineering such as Finite Element Method, Structural Dynamics, Numerical Methods, Advanced Structural Analysis, Advanced RCC Design and Advanced Steel Design.

**c) COMPUTER SCIENCE & ENGINEERING / INFORMATION TECHNOLOGY (CSE/IT):**

At the undergraduate level, the Department lays emphasis on theoretical and practical aspects of Object-Oriented Programming, Software Engineering, Computer Organization & Architecture, Database Management, Operating Systems, Theory of Computation, Compiler Design, Computer Graphics, Computer Networks and Microprocessors and Microcontrollers. The Department provides exposure to emerging technologies as well as futuristic technologies like Nanotechnology, Quantum Computing, Bioinformatics, Genetic Algorithms and Parallel Programming. The Department pursues active research groups in several research frontiers of Computer Science & Engineering like Ubiquitous Computing, Algorithms and Parallel Computing, Computational and Machine Intelligence, Computer Systems and Networks, Databases and Distributed Systems, Software Engineering and Information Systems and Systems and Network Security. Some of the active areas of research include Machine Translation, Image Processing, Machine Learning, Natural Language and Speech Processing, Big Data Analytics, Internet of Things, Pervasive Computing, Human Computer Interaction, Parallel, Distributed and Grid Computing Algorithms, Probabilistic Graphical Models, Deep Learning, Reinforcement Learning, Mobile Computing, Wireless Sensor Networks, Software Defined Networking, Service Oriented Architecture and Software Agents, Cryptography and Network Security and Cyber Laws

[For more information about Department click here](#)

**MTech in Computer Science & Engineering:** This program is actively running since 2006. The Department has 17 faculty with Ph Ds from very reputed institutions. The Post Graduates of the department are well placed in leading research laboratories, industries and universities of national and international repute. The program provides advanced level education and research exposure in various areas of computing, and features subjects like Advanced Data Structures, Advanced Computer Networks, Advanced Database Systems, Advanced Software Engineering, Advanced Operating Systems, Advanced Algorithms, High Performance Computer Architecture, Multimedia Systems, Performance Evaluation of Networks, Parallel and Distributed computing and Advanced Computational Techniques in Engineering.

**MTech in Computer Science & Engineering (Information Security):** Information Security aims to train students to become information security professionals for the high-end jobs in the security industry. The objective of this programme is to create security professionals who will be handling the real-life problems and challenges the industry is facing today in connection to cyber security. The unique design of the programme focuses on providing a high degree of industry exposure, academic and functional experts from the industry in this domain. This programme offers a brilliant career pathway to those who are passionate about knowing more about security challenges and solutions as well as practising security analytics, cybersecurity, and related tools and technologies. Job Openings for cybersecurity are also increasing by 200% each year in India.

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

**d) ELECTRONICS & COMMUNICATION ENGINEERING (ECE):** Electronics & Communication Engineering (ECE) is designed to induce in students the ability to bring technological excellence using Innovation. At the core of the stream lie Digital Signal and Image Processing, VLSI and Microelectronics, Data Communication Networks, Microwave and Antenna, Embedded Systems, Internet of Things and its applications. ECE is a multi-dimensional branch and ECE engineers are highly in demand in most of the Public sectors (PSU's) like Indian oil cop. Ltd., BHEL, BEL, GAIL, DRDO, ISRO, NTPC, HAL, BSNL, MTNL, Indian Railway etc. as well as in private companies such as ST Microelectronics, Samsung, IBM, Intel, Qualcomm, Cisco, Juniper, Nokia, British Telecom, Sony, National Instruments, Rockwell Automation and Texas instruments etc. B.Tech. in Electronics and Computer Science (ECS) is introduced with an increasing demand for engineers with good programming skills, proficiency in new industrial developments and use of the latest technologies such as Artificial Intelligence, Machine Learning, Data Science, Internet of Things, Cloud, Edge, Fog computing and Robotics. As the demand for programming-based courses is on an increase, major courses from Electronics & Communication Engineering (ECE), as well as Computer Science Engineering (CSE), are included. ECS graduates will be strong in both hardware and

software knowledge. A plethora of job opportunities will be offered to ECS graduates by major companies of ECE and CSE such as Mitsubishi, Nvidia, LinkedIn, Oracle, Infosys, TCS, Wipro, Deloitte, Accenture, Microsoft, Adobe, Google, Cisco to name a few. B.Tech. in Electronics Engineering (VLSI Design & Technology) is initiated in alignment with the semiconductor policy of the Government of India under India Semiconductor Mission (ISM), Govt. of India. The Govt. is encouraging the semiconductor companies to set up foundries and plants in India and foresees a requirement of trained manpower in the semiconductor Technologies, VLSI Design and allied areas. Through this program we aim to train and equip our undergraduate students with theoretical and practical knowledge and experience to make them ready to be able to contribute to the semiconductor industry ecosystem here in India. Major VLSI companies in India are Intel India, NXP Semiconductors, Qualcomm India, Texas Instruments in India, Synopsys India, STMicroelectronics India, ARM India, Analog Devices India, Broadcom India. The course curriculum is aligned with and is guided by the model curriculum provided by the AICTE, while retaining the flexibility to update as per the changing industry requirements.

[For more information about Department click here](#)

**MTech in Electronics & Communication Engineering:** The objective of MTech in ECE course is to produce highly skilled professionals in the field of Electronics and Communication as per the industry demand and provide the support & solutions to both academia and industry of this modern era. This course helps to implant the ability in the professionals to play a key role in the recent technological advancements in the field of computer network, communication, signal processing, VLSI design, embedded system and networked control system development. This course also inculcates the ability in the scholars to handle interdisciplinary research and development issues associated with communication and electronics technologies.

**MTech in Electronics & Communication Engineering (Internet of Things):** The course aims to enhance awareness of the development of IoT solutions using Big data, machine learning, and cloud Computing along with sensor design, interfacing. This course also provides knowledge of various communication techniques used in IoT, implementation of IoT sensor platforms for different applications, its limitations & challenges and various programming languages. This course helps to inculcate the ability in the scholars to handle interdisciplinary research and development issues associated with smart cities, smart manufacturing, smart farming, intelligent transportation, and real time health monitoring. The course is designed for scholars who wish to transition to IoT career opportunities in IT, Automotive, Manufacturing, Energy, Telecom, Healthcare and Logistics sectors.

### 3. ELIGIBILITY CRITERIA AND SELECTION FOR MTECH PROGRAMMES:

The application form is for admission to MTech Programmes at JUIT Waknaghat only.

MTech Degree	Eligibility Criteria
MTech (Biotechnology) MTech Civil Engg (Construction Mgt.) MTech Civil Engg. (Environmental Engg) MTech Civil Engg. (Structural Engg.) MTech Computer Sc. & Engg. MTech CSE (Information Security) MTech CSE (Data Science) MTech Electronics & Comm. Engg.	Bachelor's Degree in the relevant discipline with minimum 60% aggregate marks or 6 CGPA on scale of 10. <ul style="list-style-type: none"> <li>• Through PGET Entrance Test conducted by JUIT</li> <li>OR</li> <li>• Through qualified GATE Score</li> <li>OR</li> <li>• Through CUET(PG)-2024 qualified Score /</li> </ul>

MTech ECE (IoT)	Rank / Percentile OR • Merit based admission to candidates having CGPA $\geq 7.5$ in qualifying UG Degree
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<b>PROGRAMME SPECIFIC ELIGIBILITY CRITERIA FOR ADMISSION</b>	
<b>PROGRAMME OF STUDY</b>	<b>ELIGIBILITY CRITERIA</b>
MTech- Biotechnology,	BTech in Biotechnology / Bioinformatics, MSc life Sciences and equivalent degree and specialisations
MTech- Civil Engineering specialization in Environmental Engineering, Construction Management, Structural Engineering)	BE / BTech in Civil / Chemical / Environmental Engineering / other equivalent degree
MTech-Electronics & Communication Engineering, Electronics & Communication Engineering specialization in Internet of Things	BE / BTech in ECE, MSc (Electronics / Physics) / other equivalent degree
MTech- Computer Science & Engineering, Computer Science & Engineering specialization in Information Security, Data Science	BE / BTech in CSE/ IT / other equivalent degree

Admission to the programme is through PGET Test conducted by JUIT in order of merit. Candidates having qualified GATE Score are exempted from the PGET Entrance Test and shall be considered for direct admission to the programme on score of GATE qualified score.

Candidates having CUET(PG)-2024 qualified Score / Rank / Percentile will be considered for admission to the programme in order of merit.

# Candidates meeting the eligibility criteria mentioned above and having CGPA  $\geq 7.5$  or equivalent grade / percentage in qualifying examination i.e. UG Degree will be considered for merit-based admission to MTech Programme and they are exempted from PGET Entrance Test.

While filling the application form applicant must mention the details sought in item No. 9 and 10 of the application form.

Provisional Admission: Students who are in the final year are eligible to apply for admission in MTech Program. The admission is subject to successful completion of graduate Program meeting the minimum eligibility criteria. (Candidate need to submit the final graduation result before 30<sup>th</sup> September 2024, failing which admission stand cancelled.)

#### 4. NUMBER OF SEATS:

The number of seats for each MTech. Programs is limited to 18 seats (including specialisations offered by the department concerned).

Candidates seeking admission to MTech programmes offered by JUIT must meet the eligibility criteria listed above. Therefore, it is a must for candidate to go through the programme-specific eligibility criteria carefully before proceeding towards filling the application form.

## 5. RESERVATIONS:- Reservation as per provisions of Gol.

## 6. TEACHING ASSISTANTSHIP:

- Teaching Assistantships of Rs. 12000/- per month will be provided to students with valid GATE score.
- Candidates with CGPA  $\geq 7.5$  in qualifying degree will be provided TA of Rs. 12000/- per month.
- If appearing in the final year examination of the qualifying degree, then provisional TA of Rs. 12000/- per month will be offered based on the result of pre-final semester / year, subject to obtaining the CGPA  $\geq 7.5$  in the final mark-sheet of qualifying degree. The final mark-sheet of qualifying examination is to be submitted at the time of Registration to the 1<sup>st</sup> Semester or latest by 30 September of the admission year. However, release of TA is subject to production of final semester / year mark-sheet of qualifying examination and meeting the eligibility criteria only.
- The TA for valid GATE score candidates is applicable from the date of registration to the 1<sup>st</sup> semester. However, for Non-GATE candidates registered for 1<sup>st</sup> semester, TA will be applicable from 1<sup>st</sup> October of the admission year only i.e. after the last date of admission for the year.
- For subsequent semesters, TA will be admissible, subject to meeting the minimum SGPA criteria of  $\geq 7.5$  in the previous semester and other conditions as laid down in the MTech regulations.

## 7. APPLICATION FORM:

The students may fill / obtain the application forms in any of the following ways.

- a) Apply online and make payment using net banking /credit/debit card/UPI on website <http://www.juit.ac.in> / <https://www.juit.ac.in/juit-admissions>
- b) Apply online on website <http://www.juit.ac.in> / <https://www.juit.ac.in/juit-admissions> and make payment through bank draft.
- c) Obtain application form and brochure on payment of Rs. 1000/- or by sending a demand draft of Rs. 1000/- to JUIT Wagnaghat in favour of Jaypee University of Information Technology, Wagnaghat, payable at Shimla to the following address:-

The Registrar  
Jaypee University of Information Technology  
Wagnaghat, Teh. Kandaghat, Dist Solan HP, India  
PIN 173234

## 8. HOW TO APPLY:

- Log on to <http://www.juit.ac.in/juit-admissions> and click on – MTech Programmes - 2024.
- Thereafter, candidate will be prompted to fill up the application and make the payment through Credit / Debit Card / Net banking / UPI. Alternatively, you can pay application fees through DD of Rs. 1000/- favouring “Jaypee University of Information Technology” payable at Shimla. Write the application ID No. behind the DD to enable us to link your payment.

- Once the payment has been successfully made, the candidate shall be allotted an Application ID number, which must be saved for future reference. The candidate shall also get an E-Mail of confirmation.
- There is an option of attaching / uploading the photograph, signature of candidate and parents on the online application itself.
- Candidate whose result of qualifying examination is awaited may also apply for the program. However, they have to update their qualifying examination result on declaration OR by allowable date of result update as specified in supplementary Admission Brochure, so as to be eligible for counselling.
- You should make a photocopy of the application form and retain it for your record.
- Candidates who have procured the brochure and application form from university counter after payment of Rs. 1000/-, are not required to make any further payment while submitting the application form
- It is mandatory to enter the marks of the subjects sought in the application form at item no. 9 and 10. Any applications received without marks of the qualifying examination shall be rejected and candidate shall have no claim for the Merit lists.

#### **9. SENDING OF HARD COPY OF APPLICATION FORM, IF APPLIED IN OFFLINE MODE OR FEE PAID THROUGH DEMAND DRAFT**

The completed Application Form –whether purchased or print out of the offline application must be sent to JUIT Wagnaghat by **due last date** mentioned at the link [http://www.juit.ac.in/admissions\\_all/ImportantDates.pdf](http://www.juit.ac.in/admissions_all/ImportantDates.pdf) at the following address:-

The Registrar  
(MTech Admission - 2024)  
Jaypee University of Information Technology  
Wagnaghat, Teh. Kandaghat, Dist Solan HP, India  
PIN 173234

Candidates are required to ensure that the hard copy of the offline completed application OR application with Demand Draft (if not paid through online) is received at the university on or before last date.

#### **10. FEE STRUCTURE**

Please note that the fee for the students being admitted for Academic Session 2024-25 is as follows:-

Particulars	Amount (INR)
Tuition Fee for academic year 2024-25 – General Category	Rs. 68000/- per sem
Hostel Charges*	Rs. 80000/- per sem
Caution Money (One time & Refundable)	Rs. 20000/-
Admission Charges (One time & Non Refundable)	Rs. 15000/-

\*Optional and if allotted. Limited hostel seats are available. For Single room occupancy Rs. 7500/- per semester Extra.

The hostel charges are subject to revision as and when deemed fit by the management considering hike in commodity prices.

For queries, write to: admission2024@juitsolan.in OR Call +91-7807868600 / 500 / 7807846021 / 047 / 048 / 049 / 050 / 064