

ADMISSION PROCEDURE FOR M.TECH PROGRAMS - 2018

The objective of the M.Tech program is to impart advanced level knowledge in the respective fields of specialization making the students better suited to academia as well as industry and by having capabilities required for research, design and innovative development with creative aptitude. The M Tech programs provide for compulsory core courses, elective subjects and intensive project work in the respective area of specialization. Through compulsory core subjects the students acquire state-of-the-art knowledge in the domain of specialization. The elective courses give them opportunity to further specialize in the field depending on his/her interest and the future career plans. For project work, students are required to take-up problems on a particular topic to focus on knowledge application & problem solving skills during their study and work. They are required to submit a dissertation/report at the end of the project work by compiling the results of their study, findings and contributions. M.Tech project and dissertation work usually enables students to publish their results. Project work prepares the students' mind to take up challenging research and development tasks. Seminars are part of the M.Tech curriculum for training the students in creative presentations, content creation & delivery on a specific current topic.

Two-year Post-graduate programs (M.Tech.) of study to be offered at JIIT during academic session 2018-19 are given below.

➤ **Applied and Computational Mathematics**

The program is designed to train students in computational mathematics and theoretical computer science, so that they are well equipped to take up jobs in the software industry, research & development organizations. The program enables them to learn computing, simulation and numerical techniques.

➤ **Biotechnology**

The M.Tech in Biotechnology program is designed to offer diverse and extensive aspects of biotechnology and life sciences and has strong emphasis on research. The programme encompasses streams such as Medical Biotechnology, Metagenomics, Microbial Technology, Molecular Modelling, Gene and Omics Technologies, Bioprocess and Industrial Biotechnology, etc. Curriculum is enriched from electives especially devised to help individuals choose the stream of interest compliant to his/her research aspirations and current industrial demands. The courses/electives are taught by faculty having vast doctoral and post doctoral research experience from International and national premier institutes and universities. The department has been established with well equipped instrumentation and infra structure to train students in the courses and research projects. Working along with a blend of Ph.D students and research fellows involved in intense research enhances the quality of learning experience for graduate students.

➤ **Computer Science and Engineering**

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, etc. These advanced level courses and M. Tech dissertation lay the foundation for potential doctoral work in CSE.

➤ **Computer Science and Engineering with specialization in Information Security**

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 deeper understanding of security related aspects. The curriculum includes a comprehensive set of core and elective courses to achieve both these purposes.

➤ **Computer Science & Engineering with specialization in Mobile Technology**

Recent advancements in the field of wireless and mobile technologies have broken barriers regarding how we perceived of communication. Ubiquitous computing has now evolved from the nascent stage of desktop computing. Considering these a program on Master of Technology in Computer Science & Engineering with specialization in Mobile Technology has been launched w.e.f. 2015-16 session. The program aims to provide sound theoretical as well practical knowledge in Wireless Communication & Networks, Mobile Architecture & Programming, Mobile Database Management System, Mobile Operating System & Web Development etc. The students will also have wide choice of electives to enhance their knowledge in subjects of their choice. This program provides career options in the emerging technology sector of Mobile Technology. This program is open to candidates with B.Tech./B.E. in Computer Engineering/ Information Technology/ Electronics and Communication Engineering.

- **Computer Science & Engineering with specialization in Data Analytics**
It is an interdisciplinary program offered by department of CSE & IT and is designed to meet the huge manpower shortage in this area that has been well recognized as one of the fastest growing areas. All business and government organization working in commerce, policy, insurance, finance, economics, engineering, infrastructure, energy, health care, education, security, sports, media, culture, etc. are increasingly 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 is designed to inform & enlighten the students about various aspects of data analytics including research design, data collection, preparation, analysis, integration, visualization, and interpretation. In addition to the CSE & IT department, the departments of mathematics, HSS and business school also contribute courses for 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 BTech (in any discipline) or Masters (in Computer Applications/Computer Science/ IT/ Maths/ Statistics/Operations Research/Physics/Electronics/ Instrumentation/ Economics) or equivalent.
- **Computer Science & Engineering with specialization in Information Technology and Entrepreneurship**
This is a joint program by department of CSE&IT and Jaypee Business School. It is designed for IT background graduates who are interested 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.
- **Electronics & Communication Engineering with specialization in Communication Systems**
The program covers a number of areas at advanced level like Mobile, Wireless, Satellite, Optical and Computer Communication Systems and Networks, Signal Processing, Spread Spectrum Communication and Error Control Coding Techniques, Microelectronics & VLSI Design and Information & Communication theory.
- **Electronics & Communication Engineering with specialization in Micro Electronics Systems & Embedded Technology**
This interdisciplinary program focuses on Microelectronics and MEMS Devices and Technology, VHDL based Digital Design, Analogue and Digital CMOS Design and Embedded Systems Design. Students are able to make use of modern tools and techniques to implement VLSI Design on Silicon.
- **Materials Science and Engineering**
The interdisciplinary program is aimed at imparting advanced level education in areas of Nano-Materials & Technology, Semiconductor & Optoelectronics Materials & Technology, Polymers, Ceramics & Composites, Materials for Storage Devices with a strong foundation in fundamentals of structures, properties and processing of materials and computer aided modeling and simulation techniques.

Eligibility Criteria and Seats

Admission to all M.Tech Programmes shall be made based on GATE / PGET – 2018.

PROGRAM OF STUDY	NO. OF SEATS*	ELIGIBILITY CRITERIA <i>(Qualifying examination must be cleared with at least 60% marks or 6.0 CGPA on 10 point scale)</i>
Applied and Computational Mathematics	18	Master Degree in Mathematics / Applied Mathematics / Statistics / Operations Research / Computer Science/ B Tech CSE
Biotechnology	30	Masters in life sciences, 4 years Bachelors degree in Life sciences/Agriculture, MBBS, B.VSc and B.Pharm/B Tech –Biotech/B Tech Bioinformatics
Computer Science & Engineering (CSE)	30	BE/B.Tech in CSE/IT

CSE with specialization in Information Security	30	BE/B.Tech in CSE/IT
CSE with specialization in Mobile Technology	30	B.Tech in CSE/IT /ECE
CSE with specialization in Data Analytics	30	BTech (in any discipline) or Masters (in Computer Applications/Computer Science/IT/Maths/Statistics/ Operations Research/Physics/Electronics/Instrumentation/Economics) or equivalent
CSE with specialization in Information Technology and Entrepreneurship	30	BTech (CSE/IT) , MCA, MSc (Computer Science), BTech (ECE) with atleast six IT courses during graduation
ECE with specialization in Communication Systems	30	B. E. / B. Tech. in Electronics Engineering/Electronics & Electrical Engineering /Electronics & Communication Engineering / Electronics & Instrumentation Engineering / Instrumentation & Control Engineering
ECE with specialization in Micro Electronics Systems & Embedded Technology	24	BE/B.Tech in EE/EEE/ECE/CS/IT/ Instrumentation or MSc Physics with Electronics
Materials Science & Engineering	18	M.Sc. Physics/Electronics/ Chemistry(with Physics and Mathematics at the undergraduate level) or B Tech/ BE in ECE/ Mechanical/ Chemical/ Metallurgical/ Electrical Engineering.

(* Numbers may change depending on the academic profiles of candidates . Minimum student strength condition to run a program will also apply.) Candidates not scoring the minimum cut off marks, as may be decided by the admission committee, shall not be admitted, irrespective of availability of vacancy.

ADMISSION PROCEDURE

Admission to M.Tech programs as per eligibility table above shall be carried out through merit based on score of GATE/PGET-2018 separately.

Last date for Application - **31 May, 2018**
Date for PGET-2018 - **04 June, 2018 at 03.00 P.M.**
(for non GATE candidates only)at IIIT, A-10, Sector-62, Noida.

Syllabus & Format for PGET – Please see website

Application Status and exam instructions including Admit Card shall be displayed on the website. All candidates must access the same on or after **25 May, 2018.**

HOW TO APPLY

- (i) Application may be downloaded form the website (www.jiit.ac.in) or obtained through cash payment, from Registrar, IIIT, A-10, Sector-62, Noida-201 309, through a Demand Draft for Rs. 1,000/- (Rs. One thousand only) payable in favour of Jaypee Institute of Information Technology, at Noida/Delhi.
- (ii) You may apply online by visiting the link : www.getadmissions.com/jaypee
- (iii) Application form duly completed/print out of online application must reach PG Admissions, Jaypee Institute of Information Technology, A-10, Sector-62, Noida 201 309 before due date.

FEE STRUCTURE: Tuition Fee - Rs. 60,000/- per semester (subject to revision)

TEACHING ASSISTANTSHIP

A limited number of Teaching Assistantships are provided to the students with a high GATE score; and those who perform extremely well in 1st year of studies subject to meeting the minimum CGPA requirement as laid down in the M.Tech regulations.

Students admitted through PGET and performing extremely well in 1st year of studies shall be entitled to Teaching Assistantship in second year. TA ship is admissible for 5 months in a semester, subject to meeting the minimum CGPA criteria as laid down in the M.Tech regulations.