





# **B.Tech.**Electronics and Communication Engineering

# **Admission Booklet 2023-24**

## About the program

- · Industry ready curriculum
- Various Research labs funded by industries
- Well established labs with upgraded tools
- MoU with renowned Universities and Industries
- Technical Clubs and Student Chapters
- · Dedicated Mentorship
- Exposure to industries through industrial visits / interactions
- IAESTE student exchange program provides international
- Internship to the students
- Flexible scheme based on NEP





# **Core Competencies**

- · Analog and Digital Communication
- Optical Communication and Sensors
- · Semiconductor device Fabrication
- Machine Learning & AI
- MOS VLSI Design
- Object oriented Programming (OOP's)
- Computer Architecture and Processor Design
- Digital/Analog System Design
- · Embedded System
- Data structures
- · Microwave Engineering
- Mobile communication
- Micro-electromechnical Systems (MEMS)

## **Key Highlights of the Program**

- The department offers minor specializations as per industry needs.
- A basket of electives will help the students to move with specialization.
- The emphasis is on the project-based learning with projectbased lab in every semester.
- The department regularly updates the curriculum based on industry requirements and stakeholders' feedback.
- Various technical student chapters and clubs.
- Experienced faculty.
- Advanced & well-equipped curriculum and research labs.



# Salient Feature of the Department

23 **Teaching Staff** 

**Abroad Higher Studies** 

International &

**National MoU** 

500+ Research

**Student Club** /Chapter

900 +Alumni

## **Prominent Recruiters**

- Microsoft
- Dell
- Tata Consultancy Services
- Amazon
- Deloitte
- Accenture
- Oualcomm
- Ericsson
- Cadence

- STMicroelectronics
- Capgemini
- Secure meters
- eInfochips
- Evalueserve
- Mindtree
- · Mettle bugcrowd
- Infosys
- IBM

# **MoUs with Research Organizations and Industries**

- · Central Electronics Engineering Research Institute, Pilani
- · Semi-conductor Laboratory, SAS Nagar
- · Truechip Solutions, Noida
- · Advanced Level Telecommunication Training Centre, Ghaziabad
- · Secure Meters Ltd, Udaipur
- · Samara National Research University
- University of Quebec
- · University of KwaZulu-Natal, South Africa
- Swem Water Tech. (India) Pvt. Ltd., Jaipur
- · Binus University, Indonesia
- University of Leicester, UK



# **Unique Research And Lab Facilities**

- Semiconductor Fabrication Lab
- FlexMEMS Research Center (FMRC)
- Optoelectronics and Photonics Research Lab
- Simulation Lab: MATLAB, CST, SYNOPSYS, XILINX

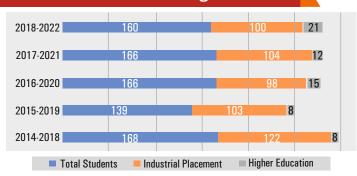
#### Research Contribution

- Published Research papers in reputed journal (SCI, SCOPUS) and International/ National Conferences
- · Patents published & granted
- Books/Book Chapter- published in WoS/Scopus/Springer

# The MUJ EDGE (Why MUJ)

- NBA, NAAC A+, AICTE, and UGC Accredited Institution
- Academic excellence through world class curriculum, delivery & feedback
- · Various scholarships for meritorious students offered by MUJ
- · Excellent placements and internships
- · Best-in-class academic, hostel and sport facilities
- · Best-in-class infrastructure
- · Qualified and Experienced faculty
- State-of-the-art Laboratories equipped with latest technology
- Student Travel Grant for International Internships
- Industry and International Collaborations

# **Student Placements and Higher Studies**



# **Eligibility**

#### MET 2023 Rank Holders

The candidate must have passed 10+2 or A Level or IB or American 12th grade or equivalent examination from recognized board with Physics, Mathematics and English as Compulsory subjects, along with any one of Chemistry, Computer Science, Biotechnology, Biology, Statistics or Engineering Drawing as an optional subject for admission to B Tech, with minimum 50% marks in Physics, Mathematics and the optional subject, put together.

Direct admission is possible if seats are available after MET. Candidates need to meet one of the following criteria:

- \*Candidates have a JEE rank and qualified for JEE Advanced in that year
- \* Based on candidate's SAT score
- $^{\star}$  MET 2023 rank holders, who could not come for counseling.
- \* All Students with Physics, Mathematics and English as compulsory subjects and who have 50% or equivalent in PMX subjects in their 12th std. where X could be Chemistry, Computers Science, Biotechnology, Biology, Statistics or Engineering Drawing.

## Fee structure

Program	Program Fee (For 4 Years)	
	Indian (Rs)	International (USD)
BTech	13,23,000/-	28,300/-

More about the Department Scan the QR Code





#### **Research Areas**

- Communication Theory & Systems
- Computer Engineering
- Electronic Circuits & Systems
- Applied Physics- Electronic Devices & Materials
- Intelligent Systems, Robotics & Control
- Machine Learning & Data Science
- Medical Devices & Systems
- Medical Imaging
- Nanoscale Devices & Systems
- Photonics
- Signal & Image Processing
- Applied Electromagnetics
- Applied Ocean Sciences
- Micro-electromechnical Systems (MEMS) Sensor

# **Career Opportunities**

- Telecom/Communication Engineer
- Software/IT Engineer
- Electronics Engineer
- VLSI Design Engineer
- Robotics and Machine Learning
- Front-end verification Engineer
- Renewable Energy
- Computer Aided Analysis and Design
- Data Security Expert
- Software Developer
- Research & Development Engineer
- Testing Engineer
- Micro-electromechnical Systems (MEMS)
- EDA/CAD Engineer

# **Key Student Achievements**

- · Arunima Nauriyal, Summer Internship, University of Rochester, 2022
- Amogh Dyavangoudar, International Summer School, Karlshure School of optics and Photonics, 2022, USD 3000.
- MUJ Startup ALMIGHT\* founded by Ashish Tummuri, B.Tech. ECE Batch (2019-2023), Mohit kumar Mishra B.Tech. ECE Batch (2019-2023) for securing "RUNNER UP" and PRIZE WORTH OF \$10000 at KardiaChain Pioneer Program 2.0 international hackathon.
- Sonam Gour and Abha Sharma, Best paper Award, International Conference in Communication, Device and Networking (ICCDN-2022).
- Ashish Tummuri, Optics & Photonics Scholarship 2022, USD 3000
- Ashish Tummuri, SPIE for Photonics Europe Travel Grant, 2022, USD 2000
- Tanvi Sharma, SPIE Officer Travel Grant 2020, USD 3000
- Rajdeep Mukherjee, SPIE Officer Travel Grant 2018, USD 3000
- Sayed Mujahid, IEEE Chapter Chair Meeting Grant 2018, USD 1500
- Aadhar Kapoor, SPIE Officer Travel Grant 2017, USD 3000
- Anshul Shrivastava, OSA Officer Travel Grant 2017, USD 3000

# **Scholarships**

- TMA Pai Engineering Scholarships
- Scholarships for Lateral Entry (B. Tech.)
- TMA Pai Merit Scholarships
- Rajasthan Merit Scholarships
- Financial Assistance for Sibling(s)
- Scholarship for "Differently- abled" Students
- Scholarships for wards of Martyrs of Defence Personnel / Para
- Military Forces
- Scholarships for the wards of Single Mother & Orphan Child



# ASIRBAD MISHRA eInfochips Pvt Ltd



The curriculum at MUJ developed my interest in VLSI beyond classroom and it helped me pursue a project in industry standard tools which later was published as a research paper due to the constant technical support and guidance from the college faculties. This blend of constant experimental learning as well as the classroom learning did help me crack the VLSI interviews that were conducted and gave me a foundation to pursue a career as a Physical Design Engineer at eInfochips Pvt Ltd (An Arrow Company).

#### **Testimonials**

## KARISHMA BABANI

Cadence



My interest in VLSI domain was developed in Btech ECE undergrad program at Manipal University. The campus curriculum and courses offered provide a strong background for interviews at industry. Electronics faculty members educated us with laboratory sessions and shared there knowledgeable experiences in VLSI. The problem-solving and learner-centric environment has helped me attain required skills for projects, presentations and placements. Manipal University has provided me a perfect platform to shape my career in VLSI. Thank you MUJ.

#### ANUJ BHARDWAJ ST Microelectronics



The institute with its state of the art VLSI labs and faculty with great depth of knowledge made me pursue the VLSI field

#### NIHARIKA MITTAL Microsoft



66 am extremely grateful to have had the opportunity to study VLSI at Manipal University Jaipur. The support and guidance provided by the faculty helped me develop a strong foundation in the field and ultimately led to my success as a Hardware Engineer. I highly recommend the Bachelors in VLSI program at MUJ for anyone looking to pursue a career in this field.

#### SATYAM Synapse Design (Quest Global)



The courses that were available in the curriculum for B.TECH like analog devices, linear integrated circuits, fundamentals of CMOS helped me get a good basic knowledge of how devices work it's circuit designing at BJT/MOS level and the semiconductor physics involved behind it. Moreover the program elective like Low power VLSI, developed an interest to further extend the gained knowledge beyond class room gave me a foundation to pursue a career as a Physical Design Engineer at Synapse Design (Ouest Global).

#### AISHANI Synopsys



66 MUJ was where I got introduced to VLSI, the world of semiconductors. It provides ample of opportunities to grow in your field of interest along with the guidance, constant support and encouragement from professors.



#### **Admission Process**



Application form initiated through our website admissions.jaipur.manipal.edu



Applicants must submit a completed application form with relevant documents within the due date.

## **Hostel Details**

Q goodhostspaces.com © 08069122800 info.jaipur@goodhostspaces.com

#### **Counsellor Contact Details**

Ms Radhika **\$ 8306006860** 

## For curriculum regarding please visit:

https://jaipur.manipal.edu/foe/programs/program-list/electronicscommunication-engineering.html



Our counsellors will guide candidates through the admission process, which is as per regulatory requirements.



Please visit the FAQ section on our website to know more about the admission process.



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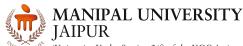
**Department Social Media Connect** 







For Admission Scan this OR Code



(University Under Section 2(f) of the UGC Act)

**9** Dehmi Kalan, Jaipur-Ajmer Expressway, Jaipur, Rajasthan - 303007











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