

Department of Electronics Engineering



Prof. Rajeev Gupta
Head of Department

Message from HOD

Department of Electronics Engineering welcomes all highly motivated, intelligent, and innovative students & their parents at Rajasthan Technical University. Electronics Engineering is the essence of today's world. Electronics Department committed to providing not only technical education to our students but also the leadership qualities through which they can create employment for others. The department was established to provide high-quality technical education and is one of the oldest in the state of Rajasthan. The department is distinguished by its highly collaborative culture as well as its core strength in advanced studies of Electronics, Control Systems, Instrumentation, Power Electronics, Machines, Power Systems, Microwave, VLSI, Nanotechnology, Signal Processing and Systems engineering IoT and robotics and AI. The department has remained at the forefront, educating and training the next generation of engineers while driving innovative research, thinking, knowledge, and skills.

VISION OF THE DEPARTMENT

To achieve academic excellence in Electronics Engineering.

MISSION OF THE DEPARTMENT

- ❖ Impart quality engineering education in Electronics Engineering.
- ❖ Facilitate and motivate learning and research.
- ❖ Prepare technical expertise along with professional ethics as per societal needs.

Program Educational Objectives (PEOs)

- ❖ To prepare graduate students with strong foundation of core and allied subjects so as to excel in professional career and research.
- ❖ To prepare graduate students to be able to provide technical solutions for real life problems that are socially and economically acceptable.
- ❖ To prepare graduate students with good communication skills, ethical values and ability to work as a team.
- ❖ To prepare graduate students with an attitude for continuous learning by updating their knowledge to meet the ever-changing technical demand.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- ❖ Apply the fundamentals of mathematics, science and engineering knowledge to identify, formulate, design and investigate complex engineering problems of analog and digital electronics circuits, communication, instrumentation and control systems.
- ❖ Apply the appropriate techniques and modern engineering hardware and software tools in electronics engineering to engage in life-long learning and to successfully adapt in multidisciplinary environments.
- ❖ Aware of the impact of professional engineering solutions in societal, environmental context, professional ethics and be able to communicate effectively.

PROGRAMMES OFFERED	
B.Tech.	Sanctioned Intake
Electronics & Communication Engineering	60
Control & Instrumentation Engineering	30
M.Tech.	Sanctioned Intake
Digital Communication	18
Control & Instrumentation Engineering	18
Nanotechnology	18

Our Team



Dr. Rajeev Gupta
Ph D, IIT Bombay
Professor and Head
Specialization: Control & Instrumentation, Soft Computing, Intelligent Control



Dr. R.S. Meena
Ph D, IIT Delhi
Designation: Professor
Specialization: VLSI Design, Microelectronics, Microwave



Dr. Mithilesh Kumar
Ph D, IIT Delhi
Designation: Professor
Specialization: UWB Microstrip Antenna and Microwave



Dr. Ranjan Maheshwari
Ph D, IIT Roorkee
Designation: Professor
Specialization: Biomedical Instrumentation and Signal processing



Dr. Dharendra Mathur
Ph D, MNIT Jaipur
Designation: Professor
Specialization: Nanotechnology, Microstrip Antenna



Dr. Ajay Khunteta
PhD, IIT Roorkee
Designation: Assoc. Prof.
Specialization: Signal and Image Processing, Communication Systems



Mr. S.N. Tak
B.Tech (MBM)
Designation: Assoc. Prof.
Specialization: Electronics Devices and Circuits



Mr. Pankaj Shukla
Pursuing PhD. RTU
Designation: Assoc. Prof.
Specialization: Digital Communication and Signal Processing.



Dr. Lokesh Tharani
PhD, MNIT Jaipur
Designation: Assoc. Prof.
Specialization: Wireless and Optical Communication Systems



Dr. Jankiballabh Sharma
Designation: Assoc. Prof.
PhD, MNIT Jaipur
Specialization: Signal and Image Processing, VLSI Design



Dr. GIRISH PARMAR
PhD, IIT Roorkee
Designation: Assoc. Prof.
Specialization: Control & Instrumentation



Dr. Manisha Bhandari
PhD, RTU
Designation: Assoc. Prof.
Specialization: Control & Instrumentation



Dr. Rajshree Taparia
Designation: Assoc. Prof.
PhD, RTU
Specialization: Control & Instrumentation



Dr. RAJESH BHATT
PhD. RTU
Designation: Assoc. Prof.
Specialization: Control & Instrumentation



Dr. Deepak Bhatia
Designation: Asst. Prof.
PhD, RTU
Specialization: Wireless & Mobile Communication, Nano Thin Films, MEMS Cantilevers Sensors, RF & Microwave Communication



Dr. M.L.Meena
Designation: Asst. Prof.
PhD, RTU
Specialization: RF & Microwave Communication, Advance Antenna Systems, EM Waves Propagation.



Mr. Shobi Bagga
Designation: Asst. Prof.
Pursuing PhD, RTU
Specialization: Nanotechnology, VLSI



Mrs. SanjuTanwar
Designation: Asst. Prof.
Pursuing PhD, RTU
Specialization: Nanotechnology



Mr. RIYAZ AHMAD
Designation: Asst. Prof.
Pursuing PhD, MNIT Jaipur
Specialization: VLSI Design



Mr. Vipin Prakash Yadav
Designation: Asst. Prof.
Pursuing PhD, MNIT Jaipur
Specialization: Digital Image and Signal Processing



Mr. Nitesh Kumar
Designation: Asst. Prof.
Pursuing PhD, MNIT Jaipur
Specialization: Optical Communication



Mr. Dinesh Bhatia
Designation: Asst. Prof.
Pursuing PhD, MNIT Jaipur
Specialization: Photonics, Optics, Wireless & Mobile Communication

Distinguished Alumni



Purnima Padmanabhan
Vice President of
Products, Cloud
Management Business at
VMware Mountain View,
California



Ajay Pal Lamba
IPS



Rajesh Kumar Agarwal
Director on the board of
Jaipur Metro



Krishan Kant Agrawal
Founder & Managing
Director at Kappa Internet
Services Private Limited



Upendra Bakolia
GM at BSNL



Ankur Mittal
MD and VP Technology at
Lowe's India



Dinesh Vijay
Director Product
Development ADM &
Signaling at Alstom



Vinod Kumawat
Senior V. P. at ALLEN
CAREER INSTITUTE



Vivek Gupta
CEO at Technology Mindz



Rajesh Sharma
VP Application
Development Senior
Manager at Citi



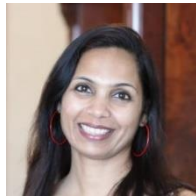
Sanjay Yadav
Executive Director Jaipur
Metro at Jaipur Metro
Railway



Ravi Sindal
Professor, Electronics and
Telecommunication at
Institute of Engineering
and Technology, Devi
Ahliya University, Indore



Khalid Qureshi
Design Verification
Manager at Xilinx India
Pvt Ltd.



Rachna Jain PMP
Manager at Qualcomm



Vinod Jain
Suntech Industries



Gaurav Garg
Executive Director at
Morgan Stanley

LABS: Well-equipped Laboratories, Equipment and software are available as per the curricula and R&D.

S. No.	Name of laboratory
1.	Advanced Communication lab
2.	Communication Lab
3.	Digital Electronics Lab
4.	Electronics Lab
5.	Instrumentation lab
6.	Microprocessor and Microcontroller lab
7.	Signal Processing lab
8.	Process Control lab
9.	Real Time Control Lab
10.	Skill Development Centre lab



Communication Lab



SDC Lab



Instrumentation Lab



Real Time Control Lab

Available Equipment/Software:

- Electronic Loop System
- Thermal Imager
- ECG/EEG/EMG Signal Acquisition Setup
- Digital Signal Processor
- 3D printer
- Vector Network Analyzer 20 GHz
- Antenna Testing Facility Anechoic Chamber
- Dry PCB Design and fabrication system
- Control Valves and Plant Simulator
- Optisuite
- MATLAB
- VLSI – CADENCE
- XILINX
- MENTOR GRAPHICS
- ORCAD P-SPICE
- VHDL PROCESSING with FPGA KIT

*Most of the software are network licensed, multiuser.

Achievements

FACULTIES:

- ❖ Received grant of Rs 26,91,000 for two different R&D projects (Mr. Nitesh Kumar, Dr Deepak Bhatia) & (Dr Sudipta Das, Dr M.L. Meena) under Collaborative Research Scheme(CRS) from AICTE TEQIP-III and additional grant of Rs 2,40,000 for R&D project by Dr Deepak Bhatia under Collaborative Research Scheme(CRS) ATU-RTU .

S.No .	Name of the Project	Principal Investigator/ Coordinator	Sponsoring Agency	Type of Funding Agency	Completed/ Ongoing
1.	Fabrication of Metal-Metal oxide core-shell Nano structure for high performance super capacitor	Dr. Deepak Bhatia	Collaborative Research Scheme(CRS)	NPIU-MHRD	Ongoing
2.	Design of Compact size Tri-Band Patch Antenna for GPS and IRNSH application	Dr. M.L. Meena	Collaborative Research Scheme(CRS)	NPIU-MHRD	Ongoing
3.	Design, Analysis, Growth and characterization of AlN/InGaN based Green LEDs	Mr. Nitesh Kumar	Collaborative Research Scheme(CRS)	NPIU-MHRD	Ongoing
4.	Design and optimization of Microstrip Antenna Arrays for 5G Application	Dr. Sudipta Das	Collaborative Research Scheme(CRS)	NPIU-MHRD	Ongoing

- ❖ All EIC Department faculty having PhD degree this year.
- ❖ 14 PhD degree awarded in last Five Years.





- ❖ Total 132 numbers of Research Publication are published in reputed Journals and conferences in last three years.
- ❖ Total 28 books are published by the faculty members of the department.
- ❖ 10 Video Lectures by Prof. R S Meena on Wave Propagation and Antenna at Education Media Research Center Jodhpur.
- ❖ 10 Video Lectures by Mr. Pankaj Shukla on Digital Communication at Education Media Research Center Jodhpur.
- ❖ Short term course on Digital Systems & Digital Communication organized by the Department with Jadavpur University.



Short term course on Digital Systems & Digital Communication

- ❖ SPIC-MACAY program of Kuchipudi dance by Prateeksha Kashi and Bansuri Vadan by Pravin Godkhindi coordinated by Mrs Manisha Bhandari
- ❖ RTU Solar power panel Inauguration and TECH FEST (THAR 2018), RTU-Hackathon-2018, 2019 coordinated by Dr. Deepak Bhatia.

- ❖ Electronics and Communication Department organize expert lecture by Prof. K. K. Sharma, Professor, Electronics and Communication Department MNIT, Jaipur on “Compressive Sensing” held on 01, September, 2018.
- ❖ Electronics and Communication Department organize expert lecture by Dr. Vijay Janyani, Professor, Electronics and Communication Department MNIT, Jaipur on “Role of Optical Communication on Wireless Communication” held on 27, October, 2018.
- ❖ Deepak Bhatia RTU State Coordinator Hackathon and Startups.
- ❖ Deepak Bhatia Organized two Hackathons:
 1. 22-23 September at Arya College Jaipur
 2. 02-03 September at SKIT Jaipur

STUDENTS:

- ❖ Winner in RTU-HACKATHON-1 held at Arya College of engineering, Jaipur



Winner in RTU-HACKATHON-1

- ❖ Students and faculty mentor participated in Smart India Hackathon, Software Edition at Nodal center Kumaraguru college of Technology Coimbatore.



Smart India Hackathon 2019

- ❖ Pritam Sharma Electronics and communication awarded with Chatra Vishwakarma Award Regional Level Winner.



Chatra Vishwakarma Award Ceremony

- ❖ Industrial visit covered Deltron India Ltd., Kasoor Solution Pvt. Ltd. And Hydro Power plant Dharmshala.



Industrial visit

- ❖ Five Students completed training program at JNTU Hyderabad



Training program at JNTU Hyderabad

- ❖ Students participated and secured First position in the event ROBOWAR Conducted during the ANNUAL SOCIO-TECHNO-CULTURAL FESTIVAL IGNUS 19, IIT JODHPUR.



ANNUAL SOCIO-TECHNO-CULTURAL FESTIVAL IGNUS 19, IIT JODHPUR

- ❖ Students participated and secured First position in Smart Business Hackathon 2019



Smart Business Hackathon

- ❖ Students participated and secured second position in Shankara Hackathon 2020.



Shankara Hackathon

- ❖ Startup agritech recognition by istart and department of information and technology in RAJIV 2019 at Jaipur Rajasthan



RAJIV 2019 at Jaipur Rajasthan

- ❖ Blood Donation, NSS day celebration, ANUKRITI, TEDx and various students activities conducted.
- ❖ Team of Robotics club won II prize (Rs 25k) in Robo war at IIT Delhi. Winner at RTU THAR 2018 at RTU Kota. Participated at IIT BHU Tech Fest.
- ❖ Three teams from II, III and IV year each having 6 members participated in RTU hackathon at Jaipur and won I prize (Rs 50k).
- ❖ Seven 6th Semester students completed internship at Jadhavpur University, Kolkata from 28th May 2019 to 26th June 2019.
- ❖ One 6th Semester student completed 45 days internship at IIT Bombay from 23rd May 2019 to 6th July 2019.