



**Raj Kumar Goel Institute of Technology, Ghaziabad**  
5KM Stone Delhi, Meerut Rd, near Raj Nagar Extension Road, Ghaziabad, Uttar Pradesh 201003



**3<sup>rd</sup> International Conference  
On  
Advancement in Electronics & Communication  
Engineering  
(AECE-2023)**



**Organized By**

**Department of Electronics & Communication (NBA Accredited)  
Department of Computer Science & Engineering**

**AFFILIATION | APPROVAL | ACCREDITATIONS**



**23<sup>rd</sup> -24<sup>th</sup> November 2023**

**IEEE-AECE-2023**

Website Link: <https://aece2023.rkgitedu.in/>

### ABOUT THE INSTITUTION

Raj Kumar Goel Institute of Technology, Ghaziabad was established in 2000 with the approval of All India Council for Technical Education (AICTE), New Delhi and affiliated to Dr. APJ Abdul Kalam Technical University (Formerly, Uttar Pradesh Technical University), Lucknow with a vision to continually develop excellent professional capable of providing sustainable solutions to challenging problems in their fields and prove responsible global citizens. The institute is conducting programs in B. Tech in CSE, CSE(AI/ML), CSE(IoT), CSE(DS), ECE, EEE, IT, CE, ME, D.Pharma, B.Pharma, M.Pharma, BBA and MBA program.

The institute stands for quality embedded higher education at par with global standard and an excellent learning environment backed by innovative state-of-the-art infrastructure. Further, it aims to add greater value to the world of crucial engineering developments and technological breakthroughs through an active focus on research and development skills.

### ABOUT THE DEPARTMENT

#### Electronics and Communication Engineering (ECE)

Electronics and Communication Engineering (ECE) Department of RKGIT works strongly to emphasize the fundamentals of the Electronics & Communication Technology, so that the students are introduced to complex subject in an interesting and easy manner. The Department is accredited by NBA and focuses on outcome based education. The Department provides the advanced courses in Communication Engineering, Microwave & Antenna Engineering, VLSI Design, Digital/Analog Integrated Circuit etc. Technical trips to several Industries, Industrial training and expert talks on the emerging technologies are organized to make the students aware about the latest advancement in the field of Electronics and Communication Engineering. The department always encourages the students to be an entrepreneur. In this regard the department organizes several Entrepreneurship awareness program.

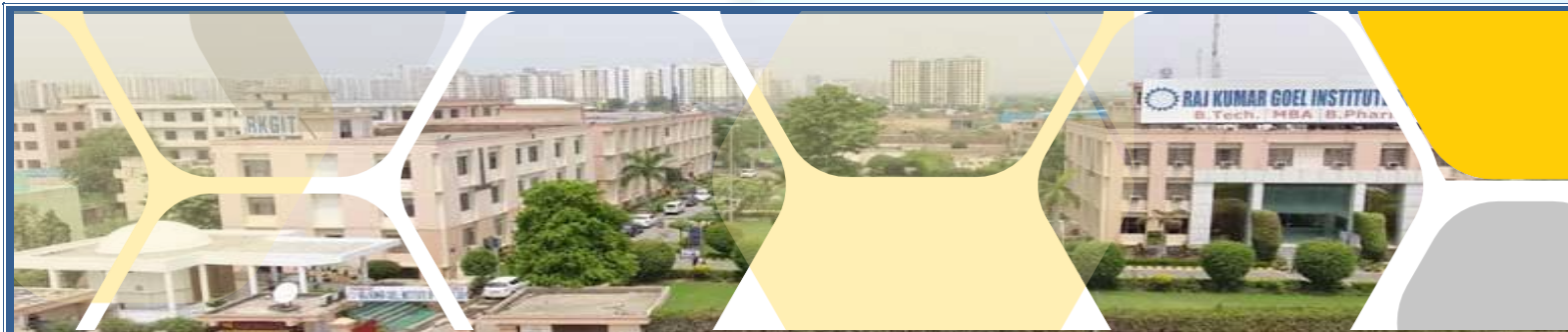
#### Computer Science & Engineering(CSE)

Computer Science & Engineering aims to motivate young professionals and enrich the budding engineers with latest trends in technology. The curriculum is designed in a way so that the students can gain hands on practical knowledge, which helps them in developing the society to lead a better and healthy life in the fast moving technocrat world. The department is committed to continuously improve the quality of education by enhancing the knowledge of students and staff members. The department of Computer Science & Engineering is well equipped with centralized laboratories having the latest configurations and software tools.

### ABOUT THE CONFERENCE

(AECE-2023) is the premier conference addressing advances in all AI, IoT & Antennas, Communication and Signal Processing including theory, tools, applications, systems, test-beds and field deployments. The conference focuses on the core science to develop fundamental principles that underpin the integration of cyber and physical elements, as well as on the development of technologies, tools, architectures and infrastructure for building AI, IoT & communication systems, highlighting the design, implementation, and investigation of communication applications. The scope of (AECE-2023) is to provide an international forum to promote, enhance and stimulate international research interactions and collaboration in the fields of Computer Science, Electronics, Electrical, Healthcare and Information Technology. It will facilitate to promote the exchange of ideas among interested researchers, students, industrialist, developers and practitioners. This conference will also feature plenary talks, workshops, and parallel technical sessions.





### **TRACK 1: COMMUNICATION, NET-WORKING AND SIGNAL PROCESSING**

- Wireless Communications & Networks
- 5G & 6G Technologies
- Modulation and Coding Techniques
- Ad-hoc & Sensor Networks
- Vehicular Networks
- Internet-of-Things (IoT) Networks
- Cognitive-Radio Networks
- Device-to-Device (D2D) Communications
- Social Network Aware Wireless Network
- Human-Computer interfaces
- Biomedical Imaging
- RADAR/Satellite Signal Processing

### **TRACK 2: RF, MICROWAVE, AND MMWAVE**

- Antennas, DRAs, MIMO and Massive Antennas, Integrated Antennas
- Radio-wave Propagation and Computation Electromagnetics
- RFICs, MICs and MMICs
- mmWave and THz Systems
- High Frequency Materials and Structures
- Microwave Imaging and Metrology

### **TRACK 3: MICRO/NANOELECTRONICS DEVICES AND CIRCUITS**

- Device Physics and Quantum Electronics
- Compact Device Modeling
- LED, MOSFET, MESFET, Fin FET, TFET
- Beyond CMOS, III-VHEMT, Ga2O3 HEMT, SET, UWB
- 2D Materials: Graphene, Spintronics, Carbon Nanotubes,
- Nanotechnology: Nanowires, Nanostructures,
- Flexible Electronics
- Analog/ Digital VLSI Circuits
- MEMS and NEMS
- System on Chip (SoC), etc.

### **TRACK 4: AI, DS, ML AND IoT**

- Artificial Intelligence, Machine Learning, Deep Learning
- Data Mining, Data Science and Data-Driven Methodology
- Neural Networks
- Fuzzy Logic
- Expert Systems
- Big Data Analytics
- Evolutionary Algorithms and Computational Intelligence
- Pattern Recognition
- Quantum Computing
- Cloud Computing
- Grid Computing
- Smart City, Smart Agriculture, and Smart Systems, etc.

### **TRACK 5: SOFTWARE ENGINEERING AND PROGRAMMING LANGUAGES**

- Programming Languages and Paradigms
- Software Development Methodologies and Processes
- Software Testing and Quality Assurance
- Software Design and Architecture
- Model-Driven Engineering and Development
- Formal Methods and Verification
- Software Evolution and Maintenance
- Human-Centered Software Design
- Software Project Management
- Code Analysis and Optimization

### **TRACK 6: POWER SYSTEM, SMART GRID AND CONTROL SYSTEM**

- Renewable and Green Energy
- Electrical Machines
- Machine Learning & Signal Processing for Power & Energy Applications
- Advanced Power Apparatus
- Power Converters

- Electric Vehicles (EVs)
- Power Electronics for Hybrid and Electric Vehicles
- Power Devices, Components and Magnetic Materials
- Renewable Energy & Energy Storage
- Measurement Techniques
- Process Control and Instrumentation
- Industrial Automation
- Recent Developments in Automation and Control

### **TRACK 8: Computer Vision and Pattern Recognition**

- Engineering Education Reforms
- Image Processing and Analysis
- Object Recognition and Tracking
- Video Analysis and Understanding
- Deep Learning for Computer Vision
- Feature Extraction and Matching
- Segmentation and Clustering
- Computational Photography
- Augmented and Virtual Reality
- Optical Character Recognition (OCR)
- Human Pose Estimation and Action Recognition
- Robotics and Vision-based Navigation

### **TRACK 9: Cybersecurity and Information Assurance**

- Network Security and Firewalls
- Cryptography and Data Encryption
- Threat Detection and Response
- Malware Analysis and Reverse Engineering
- Penetration Testing and Vulnerability Assessment
- Identity and Access Management
- Incident Response and Digital Forensics
- Secure Software Development
- Mobile Security and Bring Your Own Device (BYOD)
- Internet of Things (IoT) Security
- Social Engineering and Phishing Prevention
- Artificial Intelligence (AI) and Machine Learning (ML) for Cybersecurity

### **TRACK 10: Data Mining and Knowledge Discovery**

- Data Preprocessing and Cleaning
- Association Rule Mining
- Time-Series Analysis and Forecasting
- Web Mining and Social Network Analysis
- Feature Selection and Feature Extraction
- Big Data Mining and Analytics
- Semi-Supervised and Unsupervised Learning
- Reinforcement Learning and Decision-Making

### **TRACK 11: Robotics and Automation**

- Robot Kinematics and Dynamics
- Robot Control and Navigation
- Robot Perception and Sensing
- Mobile Robots and Autonomous Systems
- Robot Manipulation and Grasping
- Human-Robot Interaction and Collaboration
- Automation
- Service Robotics and Healthcare Robotics
- Soft Robotics and Bio-inspired Robotics

### **TRACK 12: Entrepreneurship & Innovations in Management**

- Green Marketing
- HR Analytics
- Digitalization
- MSMEs & Startup era

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Full paper in IEEE format should be submitted through on-line paper submission process (Easy chair submission system) Manuscripts for AECE-2023 will ONLY be accepted in electronic format through Easy Chair online submission system. Please do not send hard copy of your paper. If you are unable to submit your contribution electronically, please contact us through mail.

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Paper Submission Link: <https://cmt3.research.microsoft.com/AECE2023>

Website Link: <https://aece2023.rkgitedu.in/>

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## Important Dates

Paper Submission Open	February 18, 2023
Paper Submission Deadline	May 15, 2023
Final Acceptance Notification	August 08, 2023
Registration Deadline	September 09, 2023
Camera Ready Paper	October 15, 2023
Date of Conference	November 23-24, 2023

