

## 7th Students' Conference on Engineering and Systems (SCES-2022)

### Instructions for Authors:

- The first author of each submitted paper must be a student.
  - Prospective authors are invited to submit original and unpublished papers in the conference.
  - Paper(s) should be submitted in IEEE double column format limited to 6-pages in the paper template.  
(<https://www.ieee.org/content/dam/ieee-org/ieee/web/org/conferences/conference-template-a4.docx>)
  - The papers can be submitted through Microsoft Conference Management Toolkit (MS CMT) [Link for submission: <https://cmt3.research.microsoft.com/SCES2022>]
  - As per the IEEE norms, the papers submitted will undergo a peer review process for acceptance. The papers will be reviewed by the technical experts.
  - The conference will have oral and poster sessions. The papers accepted under poster session will only be included in the Conference Proceeding.
  - High quality original papers as per the standards of IEEE will be accepted under oral session and shall be sent to IEEE for possible publication in IEEE Xplore.
  - Technical program committee of the conference will decide the inclusion of paper in oral or poster sessions.
  - All the papers should be submitted through on-line paper submission process. Refer paper submission link on website for paper submission.
  - All the papers will be checked for plagiarism and papers that violate IEEE's publication principles will be summarily rejected.
- For more information and updates please visit conference website <http://www.mnnit.ac.in/sces2022/index.php>

### Call for Papers

#### Important Dates

Paper Submission opens:	January 25, 2022
Paper Submission deadline:	March 20, 2022
	<b>April 05, 2022</b>
Paper acceptance notification:	May 31, 2022
Submission of final paper with registration:	June 10, 2022

#### Registration Fees:

Category	Participants From India (INR)	Participants From other Countries (USD)
IEEE Student Member	3200	150
Non-IEEE Student Member	4000	200
All other IEEE members	4800	200
All other Non-IEEE Members	6000	250

#### Sponsorship Opportunities:

Category	Sponsorship Fee
Platinum	Rs. 100000.00
Diamond	Rs. 50000.00
Gold	Rs. 25000.00
Silver	Rs. 15000.00

## Conference Committee

Patron:	Prof. Rama Shanker Verma (Director, MNNIT Allahabad)
General Chair:	Prof. Rajesh Gupta, Head, EED
Conference Coordination Committee Chair(s):	Prof. R. K. Singh Prof. R. K. Tripathi Prof. Shubhi Purwar
Conference Chair(s):	Dr. Navneet Kumar Singh Dr. Niraj Kumar Choudhary Dr. Dipayan Guha Dr. Suman M.
Organizing Secretary:	Dr. M. Venkatesh Naik Dr. Saumendra Sarangi
Technical Program Chair(s):	Prof. Richa Negi
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Tutorial & Technical Workshop Chair:	Dr. Prashant Kumar Tiwari
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Hospitality Secretary:	

## Technical Program Committee

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 Dr. Rajasekar S, Wärtsilä Energy  
 Dr. M. Kishore Naik, Solace Power Inc.

## Advisory Committee (Tentative)

Prof. S. N. Singh, IIT Kanpur, India  
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 Dr. Satish Kumar Singh, IIIT Allahabad, India  
 Mr. R. K. Kanojia, NTPC, Meja Urja Nigam (Pvt.) Limited

## 7th Students' Conference on Engineering and Systems (SCES-2022)

Co-sponsored by

IEEE Joint Society Chapter of IE/PEL/CS

Under IEEE UP Section



Inspiring

Technology and Innovations for Global Sustainability

July 01<sup>st</sup> – 03<sup>rd</sup>, 2022



Organized by

Department of Electrical Engineering  
 Motilal Nehru National Institute of Technology Allahabad  
 Prayagraj, U.P. - 211004, INDIA

## About the Conference:

The Department of Electrical Engineering, Motilal Nehru National Institute of Technology Allahabad has successfully organized six successive students' conferences titled: "Students' Conference on Engineering and Systems (SCES-2012, SCES-2013, SCES-2014, SCES-2015, SCES-2019 & SCES-2020)", which were technically sponsored by the IEEE Uttar Pradesh Section and co-sponsored by the IEEE Joint Society Chapter of IE/PEL/CS (Industrial Electronics/ Power Electronics/ Control System). Department is organizing the seventh sequel conference of SCES to motivate student scholars working in the area of Engineering and Systems. The conference will focus on the emerging areas in the field of Power, Energy & Control, Electronics, Communication & Signal Processing, Computational Intelligence & Machine Learning, Mechanical Systems and Mechatronics, Applied Sciences, etc. The aim of the conference is to provide a platform for research students to present original work done by them which leads to sharing of knowledge at a highly technical platform. The student researchers and academicians from various reputed institutes will be invited for presentations, deliberations, and discussions. It is proposed to have a 3-day program during **July 01<sup>st</sup> - 03<sup>rd</sup>, 2022**. The technical program will comprise of keynote and tutorial sessions delivered by academic and industry experts of repute, and involve students' research work through oral /poster presentations and technical exhibitions, etc.

## About Electrical Engineering Department

The Electrical Engineering Department (EED) came into existence in the year 1961, with the objective to produce technical man power of high quality and promote research and development activity. With a modest beginning of introducing four year BE degree course in 1961, a post graduate programme in Electrical Machine / Power System / Control System was introduced in the year 1970-71. Currently, EED offers courses leading to a Bachelor of Technology in Electrical Engineering and Post Graduate (M. Tech.) and Ph.D programs in (i) Power Electronics and Drives (ii) Control & Instrumentation and (iii) Power System, under Regular, Part-Time and QIP categories. The department has qualified and experienced faculty in all the related fields of Electrical Engineering viz. Electrical Power System, Electrical Machines, Control & Instrumentation and Power Electronics. The vision of the Department is to produce globally competitive technical manpower with sound knowledge of theory and practice, with a commitment to serve the society and to foster cutting edge research in Electrical Engineering pertaining to the problems currently faced by the country and the world.

## Technical Tracks

Following are the technical tracks and topics for the technical papers to be submitted in the conference.

### Power, Energy & Control:

Control Systems, Instrumentation & Measurement, Dielectrics & Electrical Insulation, EHV AC & HVDC Transmission, Electric Vehicle/ Mobility, Energy storage & Battery Charging Techniques, Industrial Drives & Applications, Intelligent Transportation Systems, Modelling & Simulation of Machines, Power Electronic Converters, Power Quality & EMI, Power System Operation & Control, Power System Protection, Regulation & Electricity Market, Renewable Energy & Grid Integration, Robotics & Automation, Smart Grid & Micro Grid Technologies.

### Electronics, Communication & Signal Processing:

Antennas & Propagation, Circuits & Systems, Communication, Consumer Electronics, & Electromagnetics, Electron Devices & Solid-State Circuits, Micro & Nano-electronics, Photonic Technology & Applications, Optical Communication, RF, Microwave, & Millimetre Wave Techniques, Ultrasonic, Ferroelectrics, Sensors & Sensing Systems, Signal, Image & Video Processing, VLSI design, Wireless Technologies.

### Computational Intelligence & Machine Learning:

Artificial & Augmented Intelligence and their applications, Big Data Analysis, Biometrics & RFID, Computational Intelligence, Computer Networks, Computer Vision, Data & Business Analytics, Deep Learning, Image & Video Processing, Internet of Things, Machine learning, Wireless Networks & Security, 5G Networks & Cloud Computing,

### Mechanical Systems and Mechatronics:

Aerospace Engineering, Computational Fluid Dynamics, Composite Materials, Finite Element Methods, Heat & Mass Transfer, Manufacturing Technology, Mechatronics, MEMS, Refrigeration & Cryogenics, Smart Materials & Mechanics, Solid Mechanics.

### Applied Sciences:

Applied Superconductivity, Bioinformatics, Biomedical Engineering, Computational Biology, Emerging Technologies in Education, Healthcare & Agriculture etc., Engineering in Medicine & Biology, Geo-informatics and Transportation Engineering, Geoscience & Remote Sensing, Nano-biotechnology & Applications, Nuclear Science, Pervasive Computing, Social & Humanitarian Implications of Technology, Statistical Methods, Stability Theory.

## Best Paper Awards (BPA):

In each technical session, the best paper will be awarded with the *Best Paper Award* of respective technical session. Additionally, two best papers of the conference will also be honoured by *Best Paper Award* of the conference.

## Track Chairs

### Power, Energy & Control

Dr. Nitin Singh, MNNIT Allahabad  
Dr. Deepak Kumar, MNNIT Allahabad  
Dr. Prashant Kumar Tiwari, MNNIT Allahabad  
Dr. Suman M, MNNIT Allahabad  
Dr. Chandrasekhar Nalamati, MNNIT Allahabad  
Dr. Umesh Kumar Soni, MNNIT Allahabad

### Electronics, Communication & Signal Processing

Dr. Arvind Kumar, MNNIT Allahabad  
Dr. Manish Tiwari, MNNIT Allahabad  
Dr. Arun Prakash, MNNIT Allahabad  
Dr. Rajeev Gupta, MNNIT Allahabad  
Dr. Sumit Kumar Jha, MNNIT Allahabad

### Computational Intelligence & Machine Learning

Dr. Anoj Kumar, MNNIT Allahabad  
Dr. K. K. Mishra, MNNIT Allahabad  
Dr. Ranvijay, MNNIT Allahabad  
Dr. Divya Kumar, MNNIT Allahabad  
Dr. Rupesh Kumar Dewang, MNNIT Allahabad

### Mechanical Systems and Mechatronics

Dr. Venkateswara Rao Komma, MNNIT Allahabad  
Dr. Manish Gupta, MNNIT Allahabad  
Dr. Ajay Bharti, MNNIT Allahabad  
Dr. Rahul Dev, MNNIT Allahabad  
Dr. Manoj Kumar Gupta, MNNIT Allahabad  
Dr. Binayaka Nahak, MNNIT Allahabad

### Applied Sciences

Dr. Pitam Singh, MNNIT Allahabad  
Dr. Manohar Yadav, MNNIT Allahabad  
Dr. Anupam Rawat, MNNIT Allahabad  
Dr. Sameer Srivastava, MNNIT Allahabad  
Dr. Mitu Mandal, MNNIT Allahabad

## Student Committee

**Student Chair(s)** Mr. Raghendra Tiwari, Mr. Parvez Ahmed, Mr. Prashant Singh, Mr. Sandeep Ojha, Mr. Ankur Kumar, Mr. Guguloth Nagesh

**Student Co-Chair(s)** Mr. Shivem Seth, Ms. Ritika Verma, Mr. Shivam Pandey

**Conference Activities Chair(s)** Mr. Arvind Mewada, Mr. Atul Kumar

## Contact Us:

### Secretariat SCES-2022

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