



The Institution of Engineers (India)  
A Century of Service to the Nation

## Third Regional Conclave of Students' Chapters (Northern Region)

# Innovations Shaping the Future: Exploring Emerging Trends In Engineering

**Date: 16 March 2024**

**Venue:** The NorthCap University,  
Gurugram, Haryana, India

**Organised by**  
The Institution of Engineers (India)

**Hosted by**  
The NorthCap University  
in Collaboration with  
Haryana State Centre, IEI  
&  
Faridabad Local Centre, IEI

## The Institution of Engineers (India)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform from which to share professional interest. IEI has a membership strength of over 2.54 lacs. Established in 1920, with its headquarters at 8 Gokhale Road, Kolkata 700020, IEI has served the engineering fraternity for over 100 years. In this period of time, it has been inextricably linked with the history of modern-day engineering. In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India to be accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organisation across the globe. IEI functions among professional engineers, academicians, and research workers. It provides a vast array of technical, professional, and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from 125 Centres located across the country. The Institution also provides grant-in-aid to its members to conduct research and development on engineering subjects. IEI has been recognized as Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Government of India and besides conducting its own research, provides Grant-in-Aid to UG/PG/ PhD students of Engineering Institutes & Universities. IEI holds the International Professional Engineers (IntPE) Register for India under the global International Professional Engineers Alliance (IPEA). The Institution also awards the Professional Engineers (PE) Certification.

For details, please visit [www.ieindia.org](http://www.ieindia.org)

## About the University

The NorthCap University (NCU) is a progressive multidisciplinary university located in the city- centre of Gurugram, Haryana. The university's rich heritage of 25+ years, 11000+ alumni and robust academic infrastructure enables deep linkages with government, industry and research bodies. The university operates three schools in its state-of-the-art urban campus and hosts a diverse student body in the disciplines of engineering & technology, management, liberal arts, law, and applied sciences. NCU is a National Assessment and Accreditation Council (NAAC) Grade A accredited university that serves as a research and talent catalyst between students and industry. Guided by eminent academicians and industry leaders, it follows an immersive pedagogy to deliver undergraduate, postgraduate and doctoral programmes. The university is a comprehensive partner of Arizona State University. This strategic collaboration focuses on innovation, internationalisation, and digitisation. NCU students enjoy summer immersion programme and accelerated master's programmes in the US given this partnership. NCU is recognised by the University Grants Commission (UGC) and the Bar Council of India (BCI). With a 5-Star QS Ranking for Teaching, Employability, Academic Development, Online Learning and Inclusiveness, NCU ranks among the Top 30 Best Performing Universities as per Atal Ranking of Institutions on Innovation Achievements (ARIIA) rankings.

For details, please visit <https://www.ncuindia.edu>



## Objective

The field of engineering is undergoing fast transformations, driven by technological advancements and societal needs. This regional conclave aims to delve into the latest and most impactful emerging trends in engineering, exploring how these innovations are reshaping the landscape of various engineering disciplines.

The primary objective of this conclave is to bring together academicians, engineers, and industry professionals to share their insights, discoveries, and challenges related to the emerging trends in engineering. This conclave will provide a platform for participants to present and discuss their findings, fostering a collaborative environment for the exchange of ideas.

## Theme of Conclave

Innovations Shaping the Future: Exploring Emerging Trends in Engineering

### Sub-themes:

- Artificial intelligence and Machine Learning in Engineering
- Sustainable Energy Solutions
- Smart Infrastructure and Urban Development
- Cyber Security and Blockchain in Engineering
- Robotics and exoskeletons
- Internet of Things
- Augmented Reality and Virtual Reality
- Website and App Development related to socially related to problem
- Semiconductors: VLSI design and technology
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### Technical Sessions

- Artificial intelligence and Machine Learning in Engineering
- Expert Lecture(s) related to theme/Sub-theme of conclave
- Paper presentations by students on theme/sub-themes of conclave
- Model/Idea competition- Problem solving/Ideation in Engineering
- Mini Project competition- Application of knowledge and skill on particular field of study
- Technical Poster Presentation competition
- Techno Project Competition-Hardware and software co-design

**Certificate of appreciation to all participants!**

**Winners will be awarded with cash prizes !!**

## Important Dates

Undergraduate and Postgraduate students, research scholars, faculty members, industry professionals, IEI members and others are invited to contribute the posters/models/projects on the theme and sub-themes of the conclave.

Registration Opens : **08.02.2024**

Registration Closes : **25.02.2024**

Registration is a must for participating the conclave , you are requested to register using the

**link:- <https://forms.gle/MfwvKHLDbAnNbgR6>**



**Scan to Register**

## Registration Fee

- IEI Members Rs. 400 (Per Team)
- Non IEI members Rs. 500 (Per Team)

## ADVISORY COMMITTEE

Chairman: Dr G Ranganath, FIE, President, IEI

Co-Chairman: Prof (Dr) Chandrashekara S N, FIE, Chairman, AISC, IEI

## PATRONS

Prof. Prem Vrat, Pro-Chancellor, The NorthCap University

Prof. Nupur Prakash, Vice Chancellor, The NorthCap University

Comde. Diwakar Tomar (Retd.), Registrar, The NorthCap University

## ADVISORS

Prof. Swaran Ahuja, Academic Advisor, The NorthCap University

Prof. Manoj Gopaliya, Dean Academics, The NorthCap University

## GENERAL CHAIRS

Prof. Sharda Vashisth, HoD MDE, The NorthCap University

Prof. Rita Chhikara, HoD CSE, The NorthCap University

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- Prof (Dr) G Madhu, FIE, Member, AISC, IEI
- Dr G Venkata Subbaiah, FIE, Member, AISC, IEI
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- Prof (Dr) Sudhansu Sekhar Dash, FIE, Member, AISC, IEI
- Prof (Dr) P Udhaya Kumar, FIE, Member, AISC, IEI
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- Ms I Umalalitha, MIE, Member, AISC, IEI
- Er Virender Singh, AMIE, Honorary Secretary, Haryana State Centre, IEI
- Er Inderdeep Singh, FIE, Honorary Secretary, Faridabad Local Centre, IEI
- Prof. Nitin Malik, Dy. Dean RDIL, The NorthCap University
- Prof. Anjali Garg, Director CDOE, The NorthCap University

## ORGANISING COMMITTEE

Chairman: Er Rajeev Vasudeva, FIE, Chairman, Haryana State Centre, IEI

Co-Chairman: Er Kuldip Raj Gupta, FIE, Chairman, Faridabad Centre, IEI

## CONVENERS

Dr. Vandana Khanna, MIE, Associate Professor, The NorthCap University

Dr. Yogita Gigras, Associate Professor, The NorthCap University

## ORGANISING SECRETARY

Dr. Shaifali Ruhl, Assistant Professor, The NorthCap University

Dr. Garima Sharma, Assistant Professor, The NorthCap University

Dr. Satnam Singh, Associate Professor, The NorthCap University

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