

# IEEC 2021

**8<sup>th</sup>  
APRIL, 2021  
KARACHI, PAKISTAN**



## 6th International Electrical Engineering Conference (IEEC-2021)

**(HYBRID MODE)**

being held on the occasion of  
NED Centennial Year (1921-2021)

Jointly Organized by

The Institution of Engineers Pakistan

Karachi Centre



NED University of Engineering & Technology

Karachi

in collaboration with



Federation of Engineering  
Institutions of South &  
Central Asia (FEISCA)



Federation of Engineering  
Institutions of Islamic  
Countries (FEIC)



Balochistan University of  
Information Technology  
Engineering & Management  
Sciences (BUIEMS), Quetta



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Engineering & Technology  
Khuzdar



Bahria University



Dawood University of  
Engineering &  
Technology, Karachi



DHA Suffa  
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IEEE Power & Energy Society  
(Karachi Chapter)



Hamdard University



Iqra University



Institute of Industrial  
Electronics Engineers



PAF Karachi Institute of  
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Muhammad Ali Jinnah  
University



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and Technology Jamshoro



Pakistan Navy  
Engineering College - NUST



Sir Syed University of  
Engineering & Technology



Quaid-e-Awam University of  
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Usman Institute of Technology



The Institution of Engineering  
& Technology (Karachi Chapter)



### 6th International Electrical Engg. Conference (IEEC-2021)

International Electrical Engineering Conference (IEEC) is now a regular feature in the events-calendar of the Institution of Engineers Pakistan and its organizing partner NED University of Engineering & Technology, Karachi. Five International Electrical Engineering Conferences have been organized in the past in as many years. Every year, the conference is held under an innovative theme related to contemporary advancements and challenges in Electrical Engineering.

5th IEEC-2020 was held on February 21 & 22, 2020 at IEP Karachi Centre and NED University. The conference was organized in collaboration with FEISCA, FEIC, BUIEMS, BUT-Kuzdar, Bahria University, DUET, MUET, QUEST, SSUET, DHA Suffa University, National University of Computer and Emerging Sciences, Hamdard University, Iqra University, IIEE, PAF-KIET, MAJU, PNEC-NUST, UIT, IET, IEEE, Karachi Chapter. Theme of the Conference was Aspiring Pathways in Electrical Engineering (ASPIRE-2020). 40 papers were presented. The conference was attended by a number of delegates both from academia and industry that provided a great opportunity for stakeholders to meet and discuss various challenges and advancements in Electrical Engineering. Considering the rapid advancements in Electrical Engineering, IEP and its organizing partner NED University are going to organize **6th International Electrical Engineering Conference (IEEC-2021) on Thursday 8th April, 2021 under the theme: ASpiring Pathways in Electrical Engineering (ASPIRE-2021)**

### THE INSTITUTION OF ENGINEERS PAKISTAN (IEP)

IEP was established in 1948 as a premier national body working for the advancement of the engineering profession. Besides having biggest center at Karachi and headquarter in Lahore, IEP centers are in all major cities of Pakistan as well as in Riyadh, Saudi Arabia, Bahrain & Tri States (New Jersey, New York and Connecticut). IEP has signed technical collaboration agreements with more than forty professional Engineering Organizations across the globe. IEP is also the member of six international / regional engineering bodies and has the honor to represent Pakistan at these forums. The IEP Karachi Centre successfully organized the 1st, 2nd, 3rd, 4th & 5th International Electrical Engineering Conferences, jointly with NED University in the years 2016, 2017, 2018, 2019 & 2020 respectively. The events received tremendous response from international and local researchers and participants. The benchmarking event emerged as platform for professional and academia collaboration. IEP and NED are going to organize 6th International Electrical Engineering Conference which will be held on Friday 9th April, 2021.

### NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY

The NED University of Engineering & Technology, was established in March 1977 under an act of the Provincial Assembly of Sindh after upgrading of the former NED Government Engineering College, which was set up in 1921. NED University is thus one of the oldest Engineering Institutions of Pakistan which is celebrating its centenary. The university is producing high quality graduates by offering Bachelor, Masters and Doctoral Degree programs. NED University provides best learning environment and excellence in Pakistan in higher education to its students and researchers for the sustainable development and economic growth of the country. Various Seminars and Conferences are held every year which not only provide practical exposure to the students and researchers but also provide platform to strengthen its existing linkages with other academic institutions, government, academia-industry collaboration and to develop new linkages.

### DEPARTMENT OF ELECTRICAL ENGINEERING

The department of electrical engineering is offering Bachelor of Engineering (Electrical) since 1934. The undergraduate programme has since been expanding continuously – both internally as well as in contribution and collaboration with industry. The department of electrical engineering also holds a strong postgraduate setup with Masters Degree and PhD Program in Electrical Engineering. The Masters programme specializations are in Power, Energy Management and Smart Grid.

### SCOPE

The conference covers all areas of Electrical Engineering, including but not limited to the following:

- Electrical Power Systems and Policies
- Renewable Energy Technology
- Bio-robotics and Biomedical Instrumentation
- Controls, Robotics, and Automation
- Signal, Image and, Speech Processing
- Artificial Intelligence, Big Data and Cloud Computing
- Embedded Systems and IoT
- Electronics and Applications
- Information and Communication Technologies
- Computer Systems and Networks

### DEADLINE

Full Paper Submission:	Tuesday, 23rd March 2021
Acceptance Notification:	Wednesday, 31st March 2021
Camera Ready Paper Submission:	Friday, 2nd April 2021
Presentation Submission:	Monday, 5th April 2021

### INSTRUCTIONS FOR AUTHORS

Manuscript template is available at the conference website. Authors are requested to submit the full paper before the submission deadline. Papers will be submitted through easychair website, where the authors will create their account and follow the instructions for submissions. For more details, please contact at [ieec@neduet.edu.pk](mailto:ieec@neduet.edu.pk)

### REGISTRATION FEE (FOR PHYSICAL PARTICIPATION)

Authors / Presenters	Gratis
IEP Members	PKR 2000 or USD 20
Non-Members	PKR 3000 or USD 30
Students	PKR 1500 or USD 15
IEP Student Members	PKR 1000 or USD 10

Registration can be made on the prescribed forms available on the conference website. The filled forms should be emailed at [iepkc1948@gmail.com](mailto:iepkc1948@gmail.com), [main@iepkarachi.org.pk](mailto:main@iepkarachi.org.pk) or sent through mail at the postal address of IEP Karachi Centre. Payments for registration should be made through Pay Order in the name of "The Institution of Engineers Pakistan, Karachi Centre" and sent through mail to the IEP Karachi Postal Address.

### CONFERENCE VENUE

**Main Auditorium**  
NED University of Engineering & Technology, Karachi  
And associated conference facilities

### FEIC MEMBERS



## ABOUT KARACHI

Karachi is a bustling metropolis of over 20 million people, located on the southern coastline of Sindh province next to the Arabian Sea. It is the industrial and commercial hub of Pakistan with several industrial zones, an international airport, two seaports and rail and road linkages to the rest of the country. With several renowned universities located in the city, Karachi is a center for education and learning in South Asia and the Muslim world. The city is an ongoing bonanza of shopping surprises that dizzies with enchanting sights and sounds of amazing bargains. Most hotels, restaurants and many shops accept international credit cards. Pakistan standard time is Greenwich Time (GMT) + 5 hours. The electrical supply is 220-240 volts A.C.

All accepted and presented papers will be published in IEEC proceedings on NEDUET & IEP Website

CPD: PEC will award 1 credit point to participating engineers as per their defined criteria

BEST PAPER AWARD Chairman IEP Gold Medal will also be awarded to the best paper selected by expert committee.

For further information please contact:

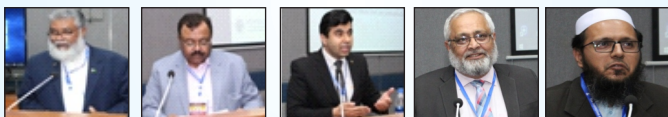
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E-mail: ieecc@neduet.edu.pk  
Web link: <https://easychair.org/conferences/?conf=ieec2021>  
<http://ieec.neduet.edu.pk>, <http://iepkarachi.org.pk/ieec.html>

ZOOM LINK WILL BE PROVIDED ON CONFERENCE WEBSITE

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