



# NEWSLETTER

ELECTRICAL AND COMPUTER  
ENGINEERING DEPARTMENT



FALL 2022



## OUR MISSION

To prepare competent electrical and computer engineering graduates conscious of professional ethical and social responsibilities for productive engineering careers in industry, academia, and research both locally and abroad.

## OUR VISION

To be recognized globally as one of the leading departments of engineering education

# WHAT'S INSIDE THIS ISSUE

ECE DEPARTMENT

FALL 2022

- Industrial Tours
- Seminars and Workshops
- ROBOFEST
- Student Week
- Convocation
- Orientation
- FIT Conference
- List of Publications
- 4th IAB Meeting ECE Dept,  
CUI Lahore
- Approval of new Masters Programs
- Welcome/Farewell Party
- Mr. Usman Iqbal PHD Defense
- MS Graduate Students  
Fall 2022





# MESSAGE FROM DIRECTOR

PROF. DR. SYED ASAD HUSSAIN

I welcome you on behalf of the faculty and staff. These are exciting times for electrical and computer engineers as the discipline is now widely recognized as an essential source of tools and techniques for advancements in nearly all spheres of human endeavor. Our students get competitive skills in effective development and application of modern technology. We see our students as excellent engineers, outstanding researchers, extraordinary analysts, and innovative designers. We are aware of everyday breakthroughs in modern technology and committed to equip our students with advanced competencies required to manage the growing needs of sciences and technology; in almost every professional field today. Research activities have been given high priority within the department resulting in a high quality of research publications. The Department of Electrical and Computer Engineering offers competitive degrees in rapidly expanding areas of study.

Our qualified faculty and excellent facilities ensure that students have a solid technical grasp on different subjects to apply this knowledge in practical work settings. Our prolific linkages with the Higher Education Commission, Ministry of Science and Technology and leading universities of the world help us keep up-to-date with new policy initiatives and market driven incentives being unrolled by the government and private sectors.



# MESSAGE FROM THE HEAD OF DEPARTMENT



I feel honored to lead the Department of Electrical and Computer Engineering (ECE) as Head and welcome all newly admitted students in various programs of the department at both undergraduate and graduate levels in Fall 20 and SP 21 semesters. Electrical and Computer Engineering (ECE) is one of the largest departments of COMSATS University Islamabad (CUI), Lahore Campus and occupies a central place in major activities at the campus. We are striving to achieve this objective by imparting rigorous and quality education to our stellar students and engaging our faculty and research groups in the cutting edge fields of the research. The degree programs offered at the department have a balanced mix of theory and practical work in the laboratories. The theory courses are taught by our excellent, highly qualified and trained faculty. For the practical work, the department has a number of laboratories with the services of dedicated Lab Engineers which are fully equipped with modern and state of the art tools needed by the undergraduate and graduate students to learn, practice and enhance their practical skills towards engineering education. All the degree programs currently being offered both at undergraduate and graduate levels are recognized by the Higher Education Commission (HEC), Islamabad Pakistan and Pakistan Engineering Council (PEC), Islamabad.

Our graduate students currently enrolled in Master's and PhD degree programs are very much involved in carrying out research activities with these research groups under the guidance of their research Supervisor towards pursue of their degrees.

I would like to assure the parents of our students that Department will take all possible steps to ensure the safety and well being of our students currently enrolled at our various programs. We (the faculty) are also deeply committed to inculcate in our graduates the essential skills and professional talent that helps them to meet the needs of the fourth industrial revolution as well as impart industry and market relevant education which may bring laurels to their adopted future careers.

In conclusion, please join us on our exciting journey into realizing your highest potential towards becoming academic leaders in Pakistan and South-East Asia . I pray to Almighty Allah (SWT) for assistance in our future endeavors and look forward towards glorious achievements in the times to come with our team work efforts.



**Engr. Dr. Ejaz A. Ansari**





## AN EDUCATIONAL TRIP TO THE MANGLA POWER STATION

The students of Bachelors in Electrical Engineering visited the Mangla Power Station. Objective of this visit was to provide students with insight of generation of hydroelectricity, turbines, transformers, switch yard, high-tension distribution lines and the relevant equipment.

## INDUSTRIAL TOURS

### VISIT TO NOOR TEXTILE LAHORE

The students of Bachelors in Electrical Engineering visited the Noor Textile industry Lahore. Objective of this visit was to provide students with the insight of contemporary technology being used in the designing and implementation of Textile industry and related domains.

### VISITS TO THE 220 KV GRID STATION, SARFRAZNAGAR

The students of Bachelors in Electrical Engineering (Power) visited the site of 220 KV grid station, Sarfraznagar. Objective of this visit was to provide students with insight of power transmission and distribution from high-voltage lines to the 11 KV feeders and the relevant power equipment such as autotransformers, CTs, circuit breakers, surge arresters and busbars etc.

### VISIT TO JAZZ NOC, LAHORE

The COC arranged an industrial visit to the Jazz/Mobilink NOC on Tuesday, November 08, 2022, for the students of FA19-BEE-Telecommunication. 24 students visited the site along with faculty members. The students were taken to the NOC, where they were given a brief overview about the NOC and their working environment. The students were also taken to the NOC real-time data monitoring facility.

### TRIP TO THE PRODUCTION SITE OF OUTFITTERS

The students of Bachelors in Electrical Engineering visited the factory production area. Objective of this visit was to provide students with insight of machinery involved in the production and the industrial automation process.

# TRANSFOPOWER INDUSTRY (PVT)

Thursday 26th and 27th Oct

2 Industrial tours were arranged for semester 5 and semester 7 students at transfpower



Industrial visit is considered as one of the tactical methods of teaching. Industrial visits provide students with a chance to meet industry leaders, professionals, entrepreneurs, policymakers, and corporates who share their wisdom, learning, and experiences. Transfpower Industry (Pvt) Limited is a leading company in Pakistan's transformer manufacturing sector. Established in 1990 by a team of engineers who literally pioneered transformer manufacturing and design in the country. The students of FA19 BEE and FA20 BEE power batch visited this industry on 26th and 27th October, 2022 respectively.

Transfpower Industry (Pvt) Limited is a leading company in Pakistan's transformer manufacturing sector. Established in 1990 by a team of engineers who literally pioneered transformer manufacturing and design in the country.

## GRID STATION VISIT

Wapda Town H Block Grid Station visit for final year Power Specialization Students





## INDUSTRIAL TOUR TO MOBILINK

Venue: Mobilink Head office, Quaid-e-Azam Industrial State, Lahore.

Day & Date: Tuesday, November 8, 2022

Person in industry: Mr. Usman Ikram Manager (NOC) and Mr. Aftab Paul Engineer (NOC).

Program and Batch: BEE(T)-FA19 [24 students]



An industrial tour was organized for the students of BEE (Telecommunication) section. The students reached the Mobilink office at 12:00 Hrs along with the respective faculty members. The faculty and students were received by our Alumni Mr. Aftab Paul. After few official procedures, students were taken to the NOC, where they were given a brief presentation by Mr. Muneeb about the NOC and their working environment. The students were also taken to the NOC real time data monitoring facility, where they were again briefed about the monitoring and handling of network in real time. At the end, souvenirs were presented to Mr. Usman and Mr. Aftab by Dr. Mujtaba as a token of thanks.

## INDUSTRIAL TOURS

### SHORT VISIT REPORT

Faculty member to visit with: Dr. Mujtaba Hussain Jaffery, Mr. M. Hassan Aslam and Mr. Nesruminallah



## REPORT ON VISIT TO THE TECHNOCRAFTS PVT, LAHORE

The COC arranged an industrial visit to the Technocrafts Pvt, Lahore on Monday, September 26, 2022, for the students of FA20-BEE-Electronics. 32 students visited the site along with faculty members. The visit was intended to provide students with opportunity to see the working of aerial vehicles and the role of electronic control system in their flight path management.

## INDUSTRIAL TOURS



## AN EDUCATIONAL TRIP TO THE FIELD SITE OF ZONG TELECOMMUNICATION

The students of Bachelors in Electrical Engineering (Telecommunication) visited a field site of Zong situated in Lahore. Objective of this visit was to provide students with insight of Base Transceiver Station, its main components, and related details of its operation.



# SEMINARS AND WORKSHOPS



**WHAT IS  
ENTREPRENEURSHIP?**

**INSTRUCTOR: MR SAJID CHOHAN**  
(SALES COACH, TRAINER &  
BUSINESS CONSULTANT)  
**FOCAL PERSON: MIAN AHMED  
YASER ( 0333 4705224)**  
**TIME: 10:00-11:30 AM**  
**DATE : NOVEMBER 2, 2022**  
**VENUE: A BLOCK SEMINAR HALL**  
**AUDIENCE: FA19-BEE, FA19-BCE,  
FA20-BEE, FA20-BCE**





Seminar on

**ENTREPRENEURSHIP  
AND  
INTRAPRENEURSHIP**

COMSATS UNIVERSITY ISLAMABAD,  
LAHORE CAMPUS  
Department of Electrical and  
Computer Engineering

**TOPICS:**

- WHO IS AN ENTREPRENEUR ?
- WHO IS AN INTRAPRENEUR ?
- ENTREPRENEUR VS INTRAPRENEUR
- HOW DO THEY DIFFER?
- WHAT ATTRIBUTES DO THEY SHARE?





"Entrepreneurship and Intrapreneurship" by  
Mr. Sajid Chohan

A Seminar on the subject title under CoC was held today 02nd November 2022 10:00-11:30 AM in the A block seminar Hall. This seminar was attended by FA19-BCE, FA19-BEE, FA20-BCE and FA20 BEE batches. The presenter of this seminar was Mr Sajid Chohan who is an experienced sales and marketing coach having worked on senior positions in Industry in the domestic sector as well as abroad.

# SEMINARS AND WORKSHOPS





## TOPICS:

WHAT IS MIT APP INVENTOR?

- INTRODUCTION AND BRIEF HISTORY
- FEATURES AND REQUIREMENTS
- MIT APP INVENTOR AND STANDARD DEVELOPMENT TOOLS

HOW TO BUILD APP USING MIT APP INVENTOR?

- DESIGN
- FUNCTIONALITY
- TESTING/EMULATING DEVELOPMENT OF SMALL APPLICATION

**INSTRUCTOR: M. HASSAN ASLAM (LECTURER)**  
mhassanaslam@cuilahore.edu.pk  
<https://sites.google.com/cuilahore.edu.pk/mianhassanaslam/>  
TIME: 10:00-11:30 AM  
DATE : OCTOBER 12, 2022  
VENUE: A BLOCK SEMINAR HALL  
AUDIENCE: FA19-BEE, FA19-BCE, FA20-BEE, FA20-BCE

## Seminar on

### MOBILE APPLICATION DEVELOPMENT FOR ENGINEERS USING MIT APP INVENTOR



Arranged by: Collaboration and Outreach Committee  
Department of Electrical and Computer Engineering  
COMSATS UNIVERSITY ISLAMABAD, LAHORE CAMPUS

## REQUIREMENTS:

LAPTOP, MOBILE PHONE (ANDROID) AND INTERNET CONNECTION









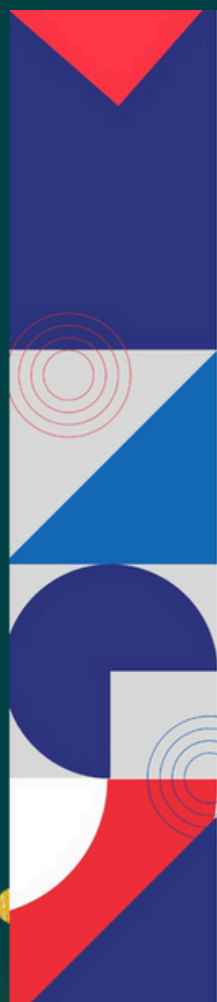
## Mobile Application Development for Engineers using MIT App Inventor

The COC arranged a seminar on October 12, 2022, on "Mobile Application Development for Engineers using MIT App Inventor". This seminar/workshop was primarily conducted for the 6th and 7th semester students of ECE dept. to help them develop mobile apps for their FYPs and semester projects. Seminar was conducted by Mr. Hassan Aslam, Lecturer, ECE Dept.



# SEMINARS AND WORKSHOPS

 <p><b>SPEAKER NAME:</b> ➔ <b>MUHAMMAD ALI AZAM</b> CEO( QIFA SOLUTIONS &amp; AA FREIGHTS)</p> <p>➔ <b>ENGR. ATTA UR REHMAN</b> FOUNDER AA FREIGHTS</p> <ul style="list-style-type: none"><li>• Python &amp; BCI</li><li>• Python is an interpreted high-level programming language for general-purpose programming</li><li>• Created by Guido van Rossum and first released in 1991, Python has a design philosophy emphasizing code readability and a syntax that allows programmers to express concepts in fewer lines of code, notably using significant whitespace. provides constructs that enable clear programming on both small and large scales.</li></ul> <p> <b>A- BLOCK SEMINAR ROOM</b> <b>COMSATS LAHORE</b></p> <p><b>Resource person :</b> Dr Zaid Ahmed 0321-4355337</p> <p><b>Focal person :</b> Mian Ahmed Yaseer 0333-4705224</p> <p> <b>14-DEC-2022</b> <b>10:00 to 11:30</b></p>	<p>ORGANIZED BY:</p> <p><b>COC ECE</b> <b>DEPARTMENT</b> <b>CUI LAHORE</b></p>  	<p>SEMINAR ON <b>PYTHON FOR ENGINEERS</b> EXAMPLE FROM COMPUTER BRAIN INTERFACE</p> <p><b>SEMINAR</b></p>  <p><b>WHO SHOULD ATTEND:</b></p> <ul style="list-style-type: none"><li>• OPEN FOR ALL</li><li>• MANDATORY FOR 7TH SEMESTER STUDENTS OF BCE AND BEE</li></ul> <p><b>PRE REQUISITES:</b></p> <ul style="list-style-type: none"><li>• BASIC PROGRAMMING SKILLS C++,MATLAB</li></ul> <p>CO-HOSTED BY: <b>IEEE CUI Lahore</b></p>
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	<p>Department of Chemical Engineering COMSATS University Islamabad (Lahore Campus)</p> <p>presents</p> <p><b>RESEARCH WORKSHOP</b></p> <p>on</p> <p><b>How to Write an Effective Literature Review for Synopsis/Thesis/Research Article</b></p> <p>by</p> <p>Dr. Aqeel Ahmed Bazmi Chairman, Department of Chemical Engineering, CUI Lahore</p> <p><b>26TH OCTOBER, 2022</b></p> <p><b>2:30 pm - 4:00 pm (PST)</b></p> <p><b>Venue</b> <b>Seminar Room, A Block, CUI Lahore</b></p>
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# SEMINARS AND WORKSHOPS



**digixvalley**

## CAREER DEVELOPMENT SEMINAR

**CAREER COUNSELLING IN ADVANCE TECHNOLOGIES**

**WHAT YOU WILL LEARN**

- OPEN LIBRARY FOR ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
- ADVANCED PROGRAMMING LANGUAGE IN EMBEDDED SYSTEM
- INDUSTRIAL PROJECTS USING EMBEDDED SYSTEM
- CAREER GROWTH IN SOFTWARE DEVELOPMENT
- TIPS TO MAKE PROFESSIONAL RESUME & LINKEDIN PROFILES

**TUESDAY  
DECEMBER 13  
09:00 AM ONWARDS AT  
SEMINAR HALL A BLOCK COMSATS LAHORE**

**COMSATS UNIVERSITY  
LAHORE**

**CONTACT** 0305-4778908 mehroz@digixvalley.com

**ZAYN SADDIQUE**  
CEO AT DIGIXVALLEY

**MEHROZ AHMAD NAJMI**  
HR MANAGER AT DIGIXVALLEY

**DR. MUHAMMAD YAQOOB JAVED**  
ASISSTANT PROFESSOR COMSATS UNIVERSITY

## KYC-First Seminar on Entrepreneurship

COC arranged a seminar on Entrepreneurship on 26th October 2022. Mr. Yasser Arafat of 'KYC-first' introduced his company and the opportunities for internship at his platform. He then invited CEOs working in building electrification, renewable energy, ERP implementation and digital marketing

## Proposal Writing for Final Year Project

The COC arranged a seminar on September 28, 2022 on "Proposal Writing for Final Year Project" for the 6th semester students of ECE dept. Seminar was conducted by Dr. Jahangir Arshad, Assistant Professor, ECE Dept. Dr. Jahangir highlighted the main points that are mandatory to be included in the proposal and the significance of this official document for the execution of an FYP.



## SEMINAR

BASED ON WIND FARM DESIGN AND COMMISSIONING

**THURSDAY  
DECEMBER 22  
4:00 PM ONWARDS AT  
SEMINAR HALL A BLOCK  
COMSATS LAHORE**

**MUHAMMAD IMRAN KHAN**  
LEAD WIND FARM COMMISSIONING  
PROJECT MANAGER

**SKILLS:**

- RENEWABLE ENERGY
- ELECTRICAL ENGINEERING
- POWER GENERATION
- PROJECT MANAGEMENT

**EXPERIENCE:**

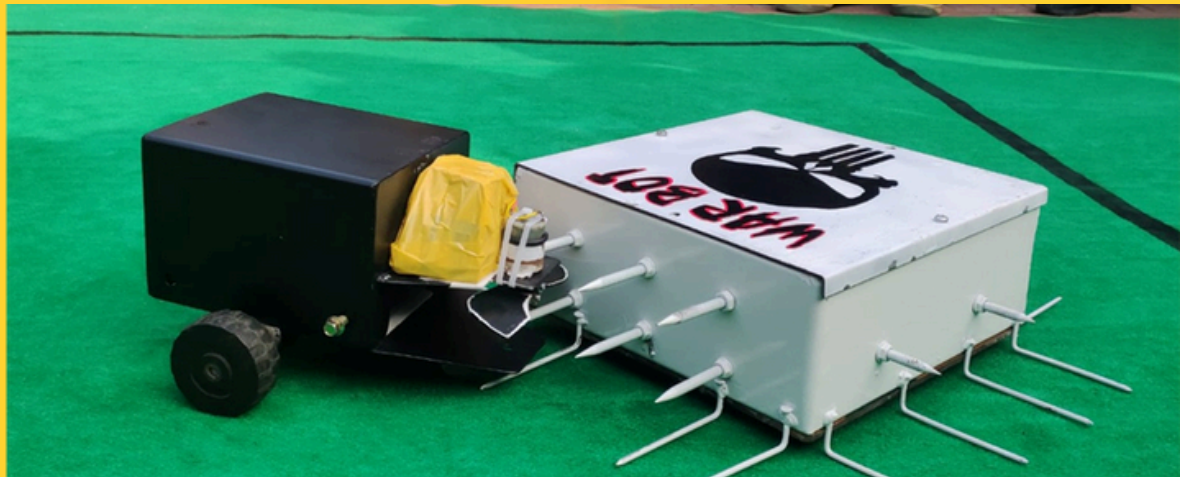
- ORSTED
- TECHNICAL INTERFACE ENGINEER - RAMPION OFFSHORE WIND FARM
- E.ON
- TECHNICAL SALES CONSULTANT
- HARDWARE DESIGN ENGINEER-INTEL

**DR. MUHAMMAD YAQOOB JAVED**  
ASISSTANT PROFESSOR COMSATS UNIVERSITY

**COMSATS UNIVERSITY ISLAMABAD  
LAHORE CAMPUS**



# ROBOFEST



## ROBO WARS ROBOFEST

### INSTRUCTORS OF TRAINING SESSIONS

Dr. Mujtaba Jaffery, Associate Professor  
PhD in Robotics & Control Systems  
Email: m.jaffery@cuilahore.edu.pk

Dr. Masood Ahmad, Assistant Professor  
PhD in Control Systems  
Email: masoodjaffar@cuilahore.edu.pk

Ayesha Ali, Assistant Professor  
Masters in Robotics  
Email: ayeshaali@cuilahore.edu.pk

Sarmad Hassan, Lab Engineer  
BS Electrical Engineering  
Email: sarmad.hassan@cuilahore.edu.pk

## ROBOFEST ROBOWAR





# STUDENT WEEK







# CONVOCATION







# ORIENTATION





# INTERNATIONAL CONFERENCE ON FRONTIERS OF INFORMATION TECHNOLOGY

Give them exclusive access to your latest collections, services, and limited offers while simultaneously improving your brand's visibility—no need to limit yourself to brochures or billboards. Clients can be up-to-date on your newest and biggest releases at home, work, and even while traveling with a simple click.



# List of Publications

1. Khosa, Ikramullah, Naveed Taimoor, Jahanzeb Akhtar, Khurram Ali, Ateeq Ur Rehman, Mohit Bajaj, Mohamed Elgbaily, Mokhtar Shouran, and Salah Kamel. "Financial hazard assessment for electricity suppliers due to power outages: the revenue loss perspective." *Energies* 15, no. 12 (2022): 4327.
2. Javed, Muhammad Azeem, Muhammad Tahir, and Khurram Ali. "Attitude in Motion: Constraints Aided Accurate Vehicle Orientation Tracking in Harsh Environment." *IEEE Transactions on Industrial Informatics* (2022).
3. Zafar, Mubeen, Muhammad Naeem Awais, and Muhammad Naeem Shehzad. "Computationally efficient memristor model based on Hann window function." *Microelectronics Journal* 125 (2022): 105476.
4. Zafar, Mubeen, Muhammad Naeem Awais, and Muhammad Naeem Shehzad. "Computationally efficient memristor model based on Hann window function." *Microelectronics Journal* 125 (2022): 105476.
5. Shabbir, Noman, Lauri Kütt, Victor Astapov, Muhammad Jawad, Alo Allik, and Oleksandr Husev. "Battery size optimization with customer PV installations and domestic load profile." *IEEE Access* 10 (2022): 13012-13025.
6. Shabbir, Noman, Lauri Kütt, Muhammad Jawad, Oleksandr Husev, Ateeq Ur Rehman, Akber Abid Gardezi, Muhammad Shafiq, and Jin-Ghoo Choi. "Short-Term Wind Energy Forecasting Using Deep Learning-Based Predictive Analytics." *Comput. Mater. Contin* 72 (2022): 1017-1033.
7. Ijaz, Salman, Hamdoon Ijaz, Mirza Tariq Hamayun, and Umair Javaid. "Active and passive fault tolerant control allocation strategy for nonlinear systems." *Journal of Vibration and Control* (2022): 10775463221097763.
8. Shahzad, Kashif, Muhammad Jawad, Khurram Ali, Jahanzeb Akhtar, Ikramullah Khosa, Mohit Bajaj, Ehab E. Elattar, and Salah Kamel. "A hybrid approach for an efficient estimation and control of permanent magnet synchronous motor with fast dynamics and practically unavailable measurements." *Applied Sciences* 12, no. 10 (2022): 4958.
9. Farooq-i-Azam, M., Z. H. Khan, S. R. Hassan, and R. Asif. "Probabilistic Analysis of an RL Circuit Transient Response Under Inductor Failure Conditions. *Electronics* 2022, 1, 0." (2022).
10. Farooq-i-Azam, Muhammad, Qiang Ni, Mianxiong Dong, Haris Pervaiz, Charilaos Zarakovitis, and Fawaz Alsolami. "Interference Avoidance in Cognitive Radio Networks Using Cooperative Localization." *IEEE Systems Journal* 16, no. 4 (2022): 5120-5130.



# List of Publications



11. Mughees, Neelam, Mujtaba Hussain Jaffery, and Muhammad Jawad. "A new predictive control strategy for improving operating performance of a permanent magnet synchronous generator-based wind energy and superconducting magnetic energy storage hybrid system integrated with grid." *Journal of Energy Storage* 55 (2022): 105515.
12. Javed, Umar, Khalid Ijaz, Muhammad Jawad, Ikramullah Khosa, Ejaz Ahmad Ansari, Khurram Shabih Zaidi, Muhammad Nadeem Rafiq, and Noman Shabbir. "A novel short receptive field based dilated causal convolutional network integrated with Bidirectional LSTM for short-term load forecasting." *Expert Systems with Applications* 205 (2022): 117689.
13. Cheung, Dennis, Peter Joe, Muhammad Nadeem, Saleem Akhtar, and M. Hassan Aslam. "Low Cost Intelligent Computer Vision based Assistive Technology for Elderly People." *Mehran University Research Journal of Engineering and Technology* 41, no. 4 (2022): 106-116.
14. Asghar, Aamer Bilal, Khazina Naveed, Gang Xiong, and Yong Wang. "Adaptive Neuro-fuzzy Algorithm for Pitch Control of Variable-speed Wind Turbine." *International Journal of Control, Automation and Systems* 20, no. 11 (2022): 3788-3798.
15. Hafeez, Muhammad Annas, Ahmer Naeem, Muhammad Akram, Muhammad Yaqoob Javed, Aamer Bilal Asghar, and Yong Wang. "A novel hybrid MPPT technique based on Harris hawk optimization (HHO) and perturb and observer (P&O) under partial and complex partial shading conditions." *Energies* 15, no. 15 (2022): 5550.
16. Javed, Muhammad Yaqoob, Iqbal Ahmed Khurshid, Aamer Bilal Asghar, Syed Tahir Hussain Rizvi, Kamal Shahid, and Krzysztof Ejsmont. "An Efficient Estimation of Wind Turbine Output Power Using Neural Networks." *Energies* 15, no. 14 (2022): 5210.
17. Farooq, Muhammad Shoaib, Haris Khalid, Ansif Arooj, Tariq Umer, Aamer Bilal Asghar, Jawad Rasheed, Raed M. Shubair, and Amani Yahyaoui. "A Conceptual Multi-Layer Framework for the Detection of Nighttime Pedestrian in Autonomous Vehicles Using Deep Reinforcement Learning." *Entropy* 25, no. 1 (2023): 135.
18. Arshad, Jehangir, Hafiza Mahnoor Asim, Muhammad Adil Ashraf, Mujtaba Hussain Jaffery, Khurram Shabih Zaidi, and Melkamu Deressa Amentie. "An Intelligent Cost-Efficient System to Prevent the Improper Posture Hazards in Offices Using Machine Learning Algorithms." *Computational Intelligence and Neuroscience* 2022 (2022).
19. Mahmood, Fatima, Jehangir Arshad, Mohamed Tahar Ben Othman, Muhammad Faisal Hayat, Naeem Bhatti, Mujtaba Hussain Jaffery, Ateeq Ur Rehman, and Habib Hamam. "Implementation of an Intelligent Exam Supervision System Using Deep Learning Algorithms." *Sensors* 22, no. 17 (2022): 6389.

# List of Publications



20. Azeem, Fawad, Ashfaq Ahmad, Taimoor Muzaffar Gondal, Jehangir Arshad, Ateeq Ur Rehman, Elsayed M. Tag Eldin, Muhammad Shafiq, and Habib Hamam. "Load management and optimal sizing of special-purpose microgrids using Two stage PSO-fuzzy based hybrid approach." *Energies* 15, no. 17 (2022): 6465.
21. Shakeel, Tanzeela, Jehangir Arshad, Mujtaba Hussain Jaffery, Ateeq Ur Rehman, Elsayed Tag Eldin, Nivin A. Ghamry, and Muhammad Shafiq. 2022. "A Comparative Study of Control Methods for X3D Quadrotor Feedback Trajectory Control" *Applied Sciences* 12, no. 18: 9254
22. Tahir, Tayyab, Adnan Khalid, Jehangir Arshad, Aun Haider, Iftikhar Rasheed, Ateeq Ur Rehman, and Seada Hussen. "Implementation of an IoT-Based Solar-Powered Smart Lawn Mower." *Wireless Communications and Mobile Computing* 2022 (2022).
23. Arshad, Jehangir, Adan Qaisar, Atta-Ur Rehman, Mustafa Shakir, Muhammad Kamran Nazir, Ateeq Ur Rehman, Elsayed Tag Eldin, Nivin A. Ghamry, and Habib Hamam. "Intelligent Control of Robotic Arm Using Brain Computer Interface and Artificial Intelligence." *Applied Sciences* 12, no. 21 (2022): 10813.
24. Okoth, Michael Aggrey, Ronghua Shang, Licheng Jiao, Jehangir Arshad, Ateeq Ur Rehman, and Habib Hamam. "A Large Scale Evolutionary Algorithm Based on Determinantal Point Processes for Large Scale Multi-Objective Optimization Problems." *Electronics* 11, no. 20 (2022): 3317.
25. Khosa, Ikramullah, Abdur Rahman, Khurram Ali, Jahanzeb Akhtar, Ammar Armghan, Jehangir Arshad, and Melkamu Deressa Amentie. "Fault-Level Grading of Photovoltaic Cells Employing Lightweight Deep Learning Models." *Computational Intelligence and Neuroscience* 2023 (2023).
26. Ali, Rafal, Ikramullah Khosa, Ammar Armghan, Jehangir Arshad, Sajjad Rabbani, Naif Alsharabi, and Habib Hamam. "Financial Hazard Prediction Due to Power Outages Associated with Severe Weather-Related Natural Disaster Categories." *Energies* 15, no. 24 (2022): 9292.
27. Ali, Rafal, Ikramullah Khosa, Ammar Armghan, Jehangir Arshad, Sajjad Rabbani, Naif Alsharabi, and Habib Hamam. 2022. "Financial Hazard Prediction Due to Power Outages Associated with Severe Weather-Related Natural Disaster Categories" *Energies* 15, no. 24: 9292.
28. Khaliq, Hafiz Saad, Joohoon Kim, Taimoor Naeem, Kashif Riaz, Trevon Badloe, Junhwa Seong, Jehan Akbar et al. "Broadband Chiro-Optical Effects for Futuristic Meta-Holographic Displays." *Advanced Optical Materials* 10, no. 22 (2022): 2201175.
29. Naeem, Taimoor, Joohoon Kim, Hafiz Saad Khaliq, Junhwa Seong, Muhammad Tariq Saeed Chani, Tauseef Tauqeer, Muhammad Qasim Mehmood, Yehia Massoud, and Junsuk Rho. "Dynamic Chiral Metasurfaces for Broadband Phase-Gradient Holographic Displays." *Advanced Optical Materials* (2023): 2202278.
30. Ali, Ayesha, Rehman, Ateeq Ur, Almogren, Ahmad, Eldin, Elsayed Tag and Kaleem, Muhammad, (2022), Application of Deep Learning Gated Recurrent Unit in Hybrid Shunt Active Power Filter for Power Quality Enhancement, *Energies*, 15, issue 20, p. 1-21



# 4TH IAB MEETING, ECE DEPARTMENT, CUI LAHORE CAMPUS



The meeting began with the recitation of the holy Quran and was followed by the individual introductions of each member. Then, Dr. Ijaz Ansari greeted the attendees and emphasized the significance of strong collaboration between industry and academia.

Dr. Naeem Shehzad, the convenor of the departmental IAB committee, presented updates on the progress made from the previous IAB meeting. Meanwhile, Dr. Naeem Awais, the Program in charge for Computer Engineering, and Dr. Asim Ali Khan, the Program in charge for Electrical Engineering, presented their respective program's assessment data. Dr. Mujtaba Hussain Jaffery, the Convenor of the CoC, also briefed the attendees on the committee's data.

The meeting continued with an open discussion, where members from the industry posed various questions and suggested possible ways to bridge the gap between academia and industry. Dr. Ijaz Ansari gave his concluding remarks before the participants were served lunch.



# APPROVAL OF NEW MASTERS PROGRAMS

 **ہائیر ایجوکیشن کمیشن**  
**HIGHER EDUCATION COMMISSION**   
Government of Pakistan, Islamabad  
Quality Assurance Division  
H9, Islamabad (Pakistan) Phone: 051-90802700  
Email: phdnoc@hec.gov.pk; msphilnoc@hec.gov.pk

Office of the  
Director (QAD)

Dir/2022/QAD-NOC/HEC/COMSATS-L/MS-ESE/3147  
Dated: January 11, 2023

**Subject: No Objection Certificate for Launch of Master of Science (MS) Energy Systems Engineering at COMSATS University, Lahore Campus**

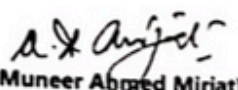
Reference your application received vide letter No. CUI-Reg/22/02 dated 03.01.2022 on the subject matter.

2. I am pleased to inform you that HEC has no objection to offering the Master of Science (MS) in Energy Systems Engineering, a Level 7 qualification at COMSATS University, Lahore Campus, with the following relevant faculty members and w.e.f Spring 2022:

- Dr. Sobia Baig, Professor
- Dr. Fawad Azeem, Assistant Professor
- Dr. Aamer Bilal Asghar, Assistant Professor

3. The University is advised to strictly comply with HEC policies prescribed for MS/MPhil/Ph.D. equivalent programs, including minimum standards for faculty, program duration, credit hours, and semester guidelines, as notified by HEC. Further, the Postgraduate Program Review Committee (PGPR) will also monitor the parameters mentioned above during their visit to the University. Moreover, in case of a change in faculty, the University shall inform the Quality Assurance Division (QAD) immediately to update the status of NOC in the database. Moreover, Higher Education Commission (HEC) reserves the right to withdraw the issued NOC if the University cannot demonstrate its ability and commitment to meet the minimum HEC criteria/guidelines.

4. Issued with the approval of the Director General (QA).

  
(Muneer Ahmed Mirjat)



**The Registrar**  
COMSATS University  
Park Road, Tarlai Kalan, Islamabad

**Copy for information to:**

- PS to Rector, COMSATS University, Park Road, Tarlai Kalan, Islamabad
- PS to Director General (QA), Higher Education Commission, Islamabad
- Office Copy



# APPROVAL OF NEW MASTERS PROGRAMS

ہائیر ایجوکیشن کمیشن  
**HIGHER EDUCATION COMMISSION**

Government of Pakistan, Islamabad  
Quality Assurance Division  
H9, Islamabad (Pakistan) Phone: 051-90802700  
Email: phdnoc@hec.gov.pk; msphilnoc@hec.gov.pk

Office of the  
Director (QAD)

Dir/2022/QAD-NOC/HEC/COMSATS-L/MS-CE/196  
Dated: December 06, 2022

**Subject: No Objection Certificate for Launch of Master of Science (MS) Computer Engineering at COMSATS University, Lahore Campus**

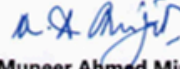
Reference your application received vide letter No. CUI-Reg/22/01 dated 03.01.2022 on the subject matter.

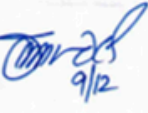
2. I am pleased to inform you that HEC has no objection to offering the Master of Science (MS) in Computer Engineering, a Level 7 qualification at COMSATS University, Lahore Campus, with the following relevant faculty members and w.e.f Fall 2022:

- Dr. Muhammad Jawad, Assistant Professor
- Dr. Ikram Ullah Khosa, Assistant Professor

3. The University is advised to strictly comply with HEC policies prescribed for MS/MPhil/Ph.D. equivalent programs, including minimum standards for faculty, program duration, credit hours, and semester guidelines, as notified by HEC. Further, the Postgraduate Program Review Committee (PGPR) will also monitor the parameters mentioned above during their visit to the University. Moreover, in case of a change in faculty, the University shall inform the Quality Assurance Division (QAD) immediately to update the status of NOC in the database. Moreover, Higher Education Commission (HEC) reserves the right to withdraw the issued NOC if the University cannot demonstrate its ability and commitment to meet the minimum HEC criteria/guidelines.

4. Issued with the approval of the Director General (QA).

  
(Muneer Ahmed Mirjat)

  
9/12  
DRGA

**The Registrar**  
COMSATS University  
Park Road, Tarlai Kalan, Islamabad

**Copy for information to:**

- PS to Rector, COMSATS University, Park Road, Tarlai Kalan, Islamabad
- PS to Director General (QA), Higher Education Commission, Islamabad
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WELCOME  
FAREWELL  
PARTY





# USMAN IQBAL PHD DEFENSE



# MS GRADUATES FALL 2022



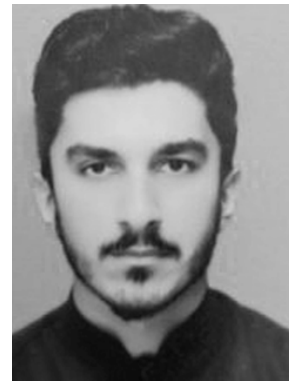
Raza Ehsan



Ali Nasir



Muhammad Asad



Muhammad Zohaib Waqar



Muhammad Hanzala



Tehseen Javaid



Muhammad Aizaz Mohyuddin



Munief Hassan Tahir



Muhammad Subiyal Fayyaz



Umair Haleem



Hafiz Muhammad Abubakar



Abdullah Tariq



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