

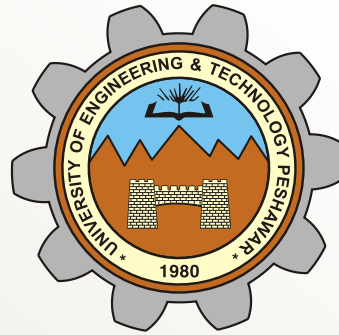
UNIVERSITY OF  
ENGINEERING AND  
TECHNOLOGY, PESHAWAR

ENGINEERING  
A PROMISING  
FUTURE!

# ANNUAL REPORT

## 2023-24





# ANNUAL REPORT 2023-24

## Vision

To be among the top ranking universities of the world through Education, Research and Innovation

## Mission

To produce highly qualified, well-rounded professionals through education who play a leading role in the society by powering and driving knowledge-based economy and offer research services and innovation for sustainable development





# TABLE OF CONTENTS

Message from the Chancellor .....	2	Chapter 8. Students Enrollment and Degrees Awarded Annually .....	71
Message from the Vice Chancellor .....	3	Chapter 09. Strengthening Physical Infrastructure .....	74
Executive Summary .....	4	Chapter 10. Strengthening Technological Infrastructure .....	78
About the University .....	5	Chapter 11. Sports .....	81
Chapter 1. University Governance .....	11	Chapter 12. Finance .....	84
Chapter 2. Academic Activities .....	14	Chapter 13. Funds Generation/Dvelopment .....	88
Chapter 3. Research and Development .....	35	Chapter 14. University-Industry-Government Liaison .....	90
Chapter 4. Innovation and Commercialization .....	52	Chapter. 16. Meetings of Authorities & Statutory Bodies .....	94
Chapter 5. Quality Assurance .....	60	Chapter. 17 Outreach Activities .....	96
Chapter 6. University Professional Ranking .....	64	Chapter 18. Litigation .....	99
Chapter 7. Faculty Development .....	66		

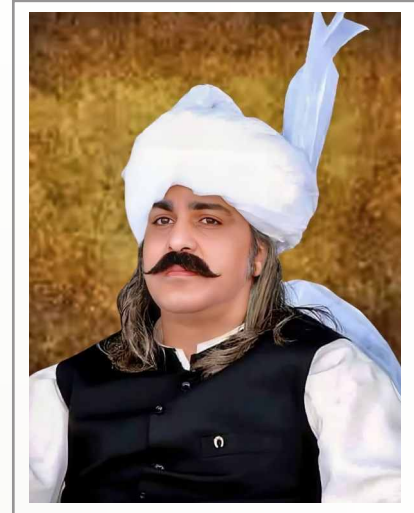


The Annual Report of UET Peshawar for the year 2023-24 outlines the university's ongoing commitment to advancing research, promoting economic growth, and addressing societal challenges. UET Peshawar has placed a strong emphasis on research, aiming to drive progress in key sectors. The university's focus on collaboration with industries, government bodies, and international stakeholders is essential in ensuring its research initiatives align with both global and local needs. Moving forward, it will be critical for UET Peshawar to continue nurturing these partnerships to enhance its role in addressing the complex issues facing our society. The university's research and academic programs must maintain relevance to the industries they serve. I am confident that these efforts will enable UET Peshawar to contribute significantly to addressing both regional and global challenges.

The launch of new degree programs in Artificial Intelligence, Robotics, and Cyber Security demonstrates UET Peshawar's proactive approach toward aligning its offerings with the demands of the modern economy. While continued government support is vital, it is equally important for the university to pursue additional avenues for financial sustainability. This can be achieved by expanding research activities and fostering consultancy opportunities with the private sector. UET Peshawar's ability to generate revenue through market-driven programs and optimize resources is a step toward reducing reliance on government funding. The university must focus on expanding these initiatives to ensure long-term financial autonomy.

I would like to acknowledge the continuous commitment of UET Peshawar's management and faculty in maintaining high academic and research standards. Their collaborative efforts have been key to the university's governance and growth, ensuring that UET Peshawar consistently meets the aspirations of its students. The faculty's dedication to fostering an environment of excellence will inspire future generations, positioning UET Peshawar as a leader in education and innovation.

As Chancellor, I am deeply committed to driving transformation in the higher education sector. Our universities must prioritize market-oriented disciplines, forge stronger industry ties, and invest in research and development. These steps are essential to ensuring that our institutions remain leaders in innovation. A culture built on values, mutual respect, and inclusivity must be at the heart of our educational institutions. We must create environments where all students, irrespective of gender, feel secure and empowered to excel. Our ultimate goal is to guide our universities towards self-sustainability and continuous growth. We must strive to develop institutions that not only shape minds but also contribute meaningfully to societal development. Together, we will build a future full of limitless possibilities for the generations to come.



**Sardar Ali Ameen Khan Gandapur**  
Chancellor / Chief Minister Khyber Pakhtunkhwa



It is both an honor and privilege to present the Annual Report for 2023–2024 as Vice Chancellor University of Engineering and Technology, Peshawar. Leading this prestigious institution has been a deeply rewarding journey, and I am proud of the transformative actions we have taken together over the past year. The activities are detailed throughout this report and you can go through these in respective sections of the report.

UET Peshawar is home to a dynamic and diverse faculty of over 400 members, including 200 Ph.D. holders from top universities worldwide. This strong intellectual capital has cultivated a thriving research culture, leading to more than 800 research publications, mostly published in impact factor journals and numerous innovative faculty projects funded by national and international agencies.

As our mission is to address real-world challenges as academic partners, our linkages with Government and industry continue to expand over the years. During the reporting period, major agreements were signed with the Gemological Institute of China, PEDO and NDMA, while you will see in the report that the university is already engaged with reputable industrial and government partners.

In line with emerging market demand, we are also launching new undergraduate and postgraduate programmes in Cyber Security, Artificial Intelligence, and Data Science from next academic intake, aimed to broaden our academic horizon and aligning with market demands.

Our university's rising stature is reflected in international rankings. In the Times Higher Education's (THE) World Universities Ranking 2023 and 2024, UET Peshawar was placed among the top 800–1000 universities worldwide; 301–351 in THE Asia Ranking; 2<sup>nd</sup> in Pakistan in Engineering, while maintaining top position in Engineering in Khyber Pakhtunkhwa. These accomplishments are a testament to the unwavering commitment of our administration, faculty, staff, and students.

Looking ahead, we are committed to advancing financial sustainability, academic excellence, and institutional integrity. A comprehensive Strategic Plan (2025–2027) is currently being developed in close alignment with the Higher Education Department of Khyber Pakhtunkhwa. This inclusive planning process will guide us toward building a university that is vibrant, future-focused, and globally recognized. As we move forward, our focus will remain on implementing this strategic vision with clear priorities and deliberate resource allocation.

All these efforts are aimed to support our students who are the real product of UET Peshawar and whose success will shape a brighter future for our society. I am proud of all we have achieved and grateful to the faculty and staff for their tireless efforts that makes UET Peshawar a distinguished brand. I assure that we will move forward with greater momentum to innovate, excel and serve.



**Prof. Dr. Sadiq Khattak**  
Vice Chancellor

The Annual Report 2023–24 presents a comprehensive overview of UET Peshawar's performance, achievements, strategic progress, and financial outlook. This report is intended for Members of the Senate, university staff, students, prospective students, and key stakeholders. It offers valuable insights into major academic milestones and sets a clear direction for the year ahead.

Aligned with our strategic plan, this reporting period marks the successful completion of several strategic objectives, with others still in progress. Guided by our vision to be a world-leading university in the region, UET Peshawar has fully transitioned to the internationally recognized Outcome-Based Education (OBE) system. This significant transformation has elevated our academic standards and enhanced the global employability of our graduates.

With a strong focus on students, research, and community engagement, we have made substantial progress in advancing our Indigenous strategy. Collaborations with government departments, local industries, and international partners have significantly contributed to this effort. During the reporting period, our faculty published 817 research papers, of which a substantial number appeared in impact factor journals, as recorded by the Quality Enhancement Cell (QEC).



UET Peshawar's excellence in teaching and research was further recognized in the Times Higher Education (THE) Impact Rankings 2023. Amid financial constraints in the higher education sector, the University successfully engaged local industry through consultancy services, generating approximately Rs. 37.03 million in revenue.

Despite prevailing economic challenges, the University's financial performance remained stable. We acknowledge and commend the collective efforts across all departments in implementing effective austerity measures. Our endowment fund, valued at Rs. 645.993 million, included diversified investments totaling Rs. 500 million in strategically identified areas of need. Moreover, faculty secured research grants worth Rs. 1,686.764 million from the Higher Education Commission (HEC) and other national and international funding agencies.

UET Peshawar has been selected as a partner university in the HEC-funded project, “Strengthening of Laboratory Facilities at Five Leading Engineering Universities”, alongwith UET Taxila, UET Lahore, UET Khuzdar, and NED Karachi. Under this initiative, the University has been committed by HEC to upgrade its state-of-the-art laboratories at the cost of Rs. 1,191.304 million. Additionally, the University's flagship development project, “Strengthening of UET Peshawar, Abbottabad Campus” continues to progress under a dedicated allocation of Rs. 1,500 million, with all phases closely monitored.

These developments collectively reflect our steadfast commitment to sustainability. We recognize that a sustainable future is integral to our mission, and we are actively undertaking initiatives to ensure our actions are aligned with this vision.

**Engr. Dr. Khizar Azam Khan**  
Registrar, UET Peshawar



UET Peshawar is a premier institution of higher learning in the field of engineering sciences in Khyber Pakhtunkhwa. Started as a College in 1952 and University in 1980, it boasts twenty three engineering departments through four faculties (Faculty of Electrical and Computer Engineering, Faculty of Civil, Agricultural and Mining Engineering, Faculty of Mechanical, Chemical and Industrial Engineering and Faculty of Architecture, Allied Sciences and Humanities, covering an entire spectrum of engineering and non-engineering disciplines at undergraduate and postgraduate degree programs, offered in its campuses including Jalojai, Bannu and Abbottabad Campus.

With producing more than 2000 graduates every year, UET Peshawar has been treading on a continuous path to achieve its goal with a stronger and more efficient infrastructure and qualified Ph.D. faculty. Currently more than 8,500 students are enrolled in various disciplines of undergraduate and postgraduate levels.

The Centers of Excellence at UET Peshawar are recognized for high impact research in various fields of engineering and teaching excellence in Pakistan. Excellence in teaching is a cornerstone of the UET experience and is based on Outcome Based Education system that emphasizes the achievement of student outcome thus brings it at par with international standards.

### Peshawar Campus

With a modest beginning in 1952 as a “constituent” College of Peshawar University, UET Peshawar was established in 1980 with three fully functional satellite campuses in Bannu, Abbottabad and Jalojai, However, Peshawar Campus remains the nucleus of the University, keeping everything moving along the correct path. At present, we have twelve centers of excellence where our faculty is actively engaged in cutting-edge fields of engineering, AI, Cyber Security, Robotics and Earthquake Engineering to name few.

There are 43 academic programs at undergraduate and postgraduate level offered to the students to choose from, which are accredited under the Washington Accord’s Outcome Based Education (OBE) System. UET Peshawar is ranked first in "Engineering category" in Khyber Pakhtunkhwa, fifth in Pakistan while third in "All Universities category" in Khyber Pakhtunkhwa. It is also ranked between 801-1000 globally according to THE Impact Ranking 2023 & 2024.



## Satellite Campuses

### ABBOTTABAD CAMPUS

UET Abbottabad Campus was inaugurated in 2002 in the old premises of Ayub Medical College. Establishment of a campus of UET Peshawar in Abbottabad has not only addressed a longstanding public demand, but also enhanced the city's image as a seat of learning. Known for its natural beauty, better climatic conditions and a vast network of educational institutions, Abbottabad was ideally suited for such an institution of higher learning in applied sciences. At present, two degree programs including Electronics Engineering and Bachelors of Architecture are offered at the Abbottabad Campus.

### BANNU CAMPUS

Bannu Campus became operational in May 2002, in the premises of the Comprehensive High School in the city. This has brought higher education in engineering sciences to this neglected middle-southern region. Prior to this, students would go to Dera Ismail Khan, Kohat or Peshawar to pursue their higher studies. Currently B.Sc Civil and Electrical Engineering disciplines are offered at Bannu Campus.

### JALOZAI CAMPUS

The Jalozai Campus funded by HEC is established on Pabbi-Cherat Road, district Nowshera, completed in June 2024. At present, five engineering and non-engineering departments including civil engineering, electrical engineering, mechanical engineering, industrial engineering and Computer Science & Information Technology are functional and offering undergraduate degree programs.



Jalozai Campus



Abbottabad Campus



Bannu Campus



## Centers of Excellence & Skill Development

### National Institute of Urban Infrastructure Planning (NIUIP)

National Institute of Urban Infrastructure Planning (NIUIP) was established in December 2010 with Higher Education Commission (HEC) funding. It is committed to promote sustainable urban development in Pakistan, and apply research in combating challenges being faced by rapidly growing urban centers in the country. NIUIP is equipped with state of the art technologies and equipment such as satellite imagery, simulation modeling for water and sewer systems, GPS and remote sensing tools, GIS digitizer, GIS scanner, Digital plotter, and licensed software such as GIS, STATA, PIPE, Oracle and GeneXproTools

- ▶ To develop it into a center of excellence for teaching, research, and training in urban infrastructure planning in Pakistan.
- ▶ To conduct research in emerging trends in urban planning and management, and urban infrastructure engineering.
- ▶ To identify and disseminate global best practices in urban planning and management.
- ▶ To develop national and international strategic partnerships for collaborative research.
- ▶ To train in-service professionals in government and non-government organizations in urban infrastructure planning.

Soon after its establishment in the year 2010, NIUIP started its postgraduate academic programs namely Urban Infrastructure Engineering and Urban Infrastructure Planning & Management. The aim of these degree programs is to perform leading edge research to groom quality researchers for the country in the field of education, research and industry.



### Continuing Engineering Education Center (CEEC)

CEEC ensures need-based trainings to the engineering community as a part of continuing engineering education to in-service engineers. The Center has been established with following objectives:

- Capacity building of engineers to engage effectively in the global economy.
- Development of indigenous capacity to ensure effective utilization of international aid.
- Promote quality of teaching and research.
- Improve project management and financial management skills.

Besides serving the engineering community in general, CEEC regularly offers Teachers Training courses in collaboration with HEC for its freshly inducted faculty.

## Centers of Excellence

### Technology Incubation Center (TIC)

Technology Incubation Center established with the help of HEC is aimed to spur economic development and job creation through technology business incubation. The Center offers support services for start-up entrepreneurs in starting and running their businesses. Besides, it also facilitates the faculty and students in obtaining Intellectual Property Rights as well as commercialization of their research. The center is fully equipped with allied facilities, offers one roof solutions including, phone, internet connectivity, video conferencing and trainings on IP and legislative matters under the qualified faculty and staff. It also aims to attract young brains to commercialize their innovative ideas and for this purpose the Center incubates small companies, selected through a supervisory committee.



### Gems and Jewelry Center of Excellence (GJCoE)

The Gems and Jewelry Center of Excellence Center is a state-of-the-art facility in gem cutting and polishing. The center with its qualified teaching faculty and laboratories offers five month diploma in gemology and lapidary. The Center has been upgraded to Gems and Jewelry Center of Excellence that will not only provide training in gemology and lapidary, but value gems and precious stones.

### Earthquake Engineering Center (EEC)

UET Earthquake Engineering Center is a multi-disciplinary research and education Center, established with the aim to mitigate the seismic disaster risk in the province in particular and country, in general. The center has made tremendous progress so far in the last few years. It has been upgraded to the National Institute of Earthquake Engineering with the funding of Rs. 487.219 million by HEC. The center has developed research collaborations with renowned international organizations, research centers and universities for human resource development, research and development activities.

### National Center for Robotics and Automation

The Advanced Robotics and Automation Lab (ARAL), located at the Department of Mechatronics Engineering, UET Peshawar, was established in 2018 and is part of the National Center of Robotics and Automation (NCRA), Pakistan. As part of a response to our national challenges such as lack of agriculture technology and productive automation, the lab is actively involved in research and prototype development pertaining to all aspects of precision agriculture, industrial automation and biomedical devices. The lab is headed by Prof. Dr. Muhammad Tahir Khan who leads a team of established researchers having Ph.D. degrees from countries; Canada and UK. Several research associates, assistants, and Master/PhD students are also engaged in research on different funded projects.

### National Center for Big Data & Cloud Computing (NCBC)

The vision of NCBC is to effectively utilize cloud computing for Big Data applications for solution to problems of national importance. Keeping in view the advantages of cloud computing in provisioning and processing of big data and its suitability for the emerging trend in mobile devices and Pakistani R&D environment having limited hardware resources, the utility of the cloud computing is plausible. In NCBC, our focus is on the following key sub-domains, which are R&D problems of National importance.



- ▶ Multimedia streaming and analytics
- ▶ Remote sensing big data analytics
- ▶ Traffic characterization and analytics
- ▶ Cloud integration and analytics for mass data platform

### **National Center for Cyber Security**

The National Centre for Cyber Security at the University of Engineering & Technology, Peshawar (NCCS-UETP), established in 2018, is a leading Centre dedicated to addressing Pakistan's cyber security challenges. With its three specialized labs: Security Testing, IoT Security, and Blockchain Security, the center focuses on developing advanced solutions for securing web applications, enhancing IoT device protection, and utilizing blockchain technology for secure application development. NCCS-UETP has made significant contributions through its cutting-edge research, development of innovative security tools, and the training of skilled cyber security professionals. As an Accredited Training Centre (ATC) of the globally recognized EC-Council, it provides international certifications such as CEH and CHFI, preparing the next generation of cyber security experts to meet industry demands. NCCS-UETP collaborates with both public and private sectors, fostering strong industry-academia partnerships to ensure its research addresses real-world security problems. With the recent launch of its BS Cyber Security program, the center leads efforts in strengthening Pakistan's cyber security infrastructure through impactful research, education, and industry collaboration.

### **Center of Intelligence Systems and Network Research**

Competing with international engineering institutes in the field of research and development, UET Peshawar established a range of research centers and centers of excellence. Center for Intelligent Systems and Networks Research (CISNR) was among the pioneering research centers of UET Peshawar for solving indigenous problems of the country utilizing AI and ICT technologies. CISNR was established back in March 2012 with funding from the Ministry of IT & Telecom. The journey started with a small group of Engineers, Computer Scientists and AI researchers which has now transformed into a huge family of 80 individuals. The spectrum of the Centre has expanded to the fields of energy, water, disaster management, climate change, smart climate agriculture, health and safe city; thus covering 10 SDGs.

It's a registered public consultancy, providing not only technical recommendations but also hard-coded solutions for the local industry. Our mission is to provide smart, secure, and innovative solutions that pave the way for a prosperous society while ensuring gender inclusiveness. CISNR specializes in technological and social development sectors, offering global expertise applied locally. From analysis to implementation, our overarching goal is to provide intelligent solutions that harmonize safety, economic growth, and environmental considerations through precise data acquisition and technology.

The Center focuses on fostering national AI and IoT capacity, empowering innovators, and conducting research in various AI & IoT fields to prevent or minimize disasters using data intelligence. With expertise spanning Smart Grid, Smart Metering, Intelligent System Design, Electrical Communication Systems, Multi-Core Processing, Energy/Utility Management, Artificial Intelligence, IoT, and Cloud Computing, CISNR stands as the sole nationwide institution in both AI, IoT and AIoT.

### **National Center for Artificial Intelligence (AI)**

National Center of Artificial Intelligence (NCAI) was inaugurated at the main campus of National University of Sciences & Technology (NUST) at NUST on 16th of March, 2018. NCAI is the latest technological initiative of Government of Pakistan under the government's Vision 2025 where leading universities are its partners.

The center at UET Peshawar is designed to become the leading hub of innovation, scientific research, knowledge transfer to the local economy, and training in the area of Artificial Intelligence (AI) and its closely affiliated fields. The central aim is to facilitate the researchers in the field of AI; help them establish and grow AI industry following international trends and seek solutions to the indigenous problems through AI.

### **U.S.-Pakistan Center of Advanced Studies in Energy (USPCAS-E)**

The U.S.-Pakistan Center of Advanced Studies in Energy (USPCAS-E) at UET Peshawar is designed to support Pakistan's economic development by strengthening the relevance and responsiveness of university products, including applied and policy research and skilled graduates, to the needs of the public and private sector. The Center is proceeding efficiently towards the achievements of its goals through improving governance, innovative research and curriculum reforms. As a pivotal and comprehensive research center, USPCAS-E UET Peshawar realizes the responsibility for finding sustainable solutions to the energy crisis in Pakistan.



## Affiliated Engineering Colleges

- Institute of Communication and Technology, Islamabad



# University Governance

## CHAPTER 1

## SENATE

As per the Khyber Pakhtunkhwa Universities Act 2012, the Senate consists of the following:

- The Chancellor, who shall be the Chairperson of the Senate;
- The Pro-Chancellor;
- The Vice Chancellor;
- One member of the Provincial Assembly of the Khyber Pakhtunkhwa to be nominated by the Speaker of the said Assembly;
- A retired judge to be nominated by Chief Justice of Peshawar High Court;
- Secretary of the relevant Administrative Department of Government or his nominee not below the rank of an Additional Secretary;
- The Secretary to Government, Higher Education Department, or his nominee not below the rank of an Additional Secretary;
- The Secretary to Government, Finance Department, or his nominee not below the rank of an Additional Secretary;
- The Secretary to Government, Establishment Department, or his nominee not below the rank of an Additional Secretary;
- The Chairman, Higher Education Commission or his nominee not below the rank of Director General;
- One eminent or distinguished graduates of the University who are not its employees to be nominated by the Chancellor;
- Two persons from the academic community of the Province of the Khyber Pakhtunkhwa or the country, other than an employee of the University, at the level of professor or Principal, to be appointed by the Chancellor;
- Four University Teachers, including one Professor, one Associate Professor, one Assistant Professor and one Lecturer to be elected by teachers of their respective cadres from amongst themselves;
- Four persons from society at large being persons of distinction in the fields of administration, management, education, academics, law, accountancy, medicine, fine arts, architecture, industry, agriculture, science, technology and engineering with a view to create diversity and balance across the various fields, to be nominated by the Chancellor;
- One University Administrative Officer to be elected from amongst all the Administrative Officers in the prescribed manner.

## SYNDICATE

As per the Khyber Pakhtunkhwa Universities Act 2012, the Syndicate consists of the following:

- The Vice Chancellor, who shall be its Chairperson;
- A retired judge to be nominated by Chief Justice of Peshawar High Court;
- All the Deans of the faculties of the University;
- Secretary of the relevant administrative Department or his nominee not below the rank of an Additional Secretary;
- The Secretary to Government, Higher Education Department, or his nominee not below the rank of a Deputy Secretary;
- The Secretary to Government, Establishment Department, or his nominee not below the rank of Additional Secretary;
- The Secretary to Government, Finance Department, or his nominee not below the rank of Additional Secretary;
- Two Principals (preferably one male and one female) of affiliated colleges to be nominated by the Academic Council;



- One Professor, One Associate Professor, One Assistant Professor and one Lecturer of the University to be elected by teachers of their respective cadres in the manner as may be prescribed by Statutes;
- One Principal or Chairman or Director of the Teaching Department or Institute or Centre to be elected from amongst themselves in accordance with the prescribed Statutes;
- One administrative officer to be elected from amongst themselves in a manner as may be prescribed by Statutes;
- Registrar;
- Treasurer;
- One nominee of the Commission not below the rank of an advisor or member;
- One person of eminence to be nominated by the Chancellor and
- Two University Administrative Officers to be elected from amongst all administrative officers in the prescribed manner.

## ACADEMIC COUNCIL

As per the Khyber Pakhtunkhwa Universities Act 2012, the Academic Council consists of the following:

- The Vice Chancellor, who shall be its Chairperson;
- The Chairpersons of Teaching Departments or Directors of academic institutes/units;
- The Deans;
- All Professors including Emeritus and Meritorious Professors;
- Six university teachers including two Associate Professors, two Assistant Professors and two lecturers to be elected from amongst themselves in the manner prescribed by Statutes;
- Two Principals, preferably one female, of affiliated colleges, one each from public and private sector, to be nominated by the relevant administrative Secretary of the Government department;
- One Principal of the constituent college, to be nominated by the Senate;
- The Director Admissions;
- The Controller of Examinations; and
- The Registrar, who shall be its member-cum-secretary.

# Academic Activities

## CHAPTER 2

## Academic Programs 2023-24

### Undergraduate Engineering Programs

- B.Sc Agricultural Engineering (Peshawar Campus)
- B.Sc Chemical Engineering (Peshawar Campus)
- B.Sc Civil Engineering (Peshawar Campus)
- B.Sc Computer Systems Engineering (Peshawar Campus)
- B.Sc Electrical Engineering (Communication) (Peshawar Campus)
- B.Sc Electrical Engineering (Power) (Peshawar Campus)
- B.Sc Industrial Engineering (Peshawar Campus)
- B.Sc Mechanical Engineering (Peshawar Campus)
- B.Sc Mechatronics Engineering (Peshawar Campus)
- B.Sc Mining Engineering (Peshawar Campus)
- B.Sc Civil Engineering (Bannu Campus)
- B.Sc Electrical Engineering (Bannu Campus)
- B.Sc Electronics Engineering (Abbottabad Campus)
- B.Sc Civil Engineering (Jalozai Campus)
- B.Sc Electrical Engineering (Jalozai Campus)
- B.Sc Mechanical Engineering (Jalozai Campus)
- B.Sc Industrial Engineering (Jalozai Campus)

### Undergraduate Non-Engineering Programs

- BS Computer Science (Peshawar Campus)
- BS Computer Science (Jalozai Campus)
- BS Data Science (Peshawar Campus)
- Bachelor of Architecture (Abbottabad Campus)

### Postgraduate Engineering Programs

- M.Sc. Ph.D Agricultural Engineering
- M.Sc. Ph.D Civil Engineering
- M.Sc. Ph.D Electrical Engineering
- M.Sc. Ph.D Electronics Engineering
- M.Sc. Ph.D Artificial Intelligent
- M.Sc. Ph.D Mechanical Engineering
- M.Sc. Ph.D Mechatronics Engineering
- M.Sc. Ph.D Mining Engineering
- M.Sc. Ph.D Chemical Engineering
- M.Sc. Ph.D Industrial Engineering
- M.Sc. Ph.D Urban Infrastructure Engineering
- M.Sc. Ph.D Computer Systems Engineering
- M.Sc. Electrical Energy System Engineering
- M.Sc. Renewable Energy Engineering
- M.Sc. Thermal System Engineering
- M.Sc. Energy Management & Sustainability
- M.Sc. Materials for Energy Storage and Conversion

### Postgraduate Non-Engineering Programs

- M.Sc. Ph.D Urban Infrastructure Planning & Management
- M.Sc. Ph.D Computer Science & Information Technology
- M.Sc. Architecture (Abbottabad Campus)
- M.Sc. Ph.D Mathematics



## Faculties

### Faculty of Electrical & Computer Engineering

- Department of Electrical Engineering, Peshawar
- Department of Electrical Engineering, Bannu Campus
- Department of Electrical Engineering, Jalojai Campus
- Department of Computer Systems Engineering, Peshawar Campus
- Department of Electronics Engineering, Abbottabad Campus
- Department of Computer Science, Peshawar Campus
- Department of Computer Science, Jalojai Campus

### Faculty of Mechanical, Chemical & Industrial Engineering

- Department of Mechanical Engineering, Peshawar Campus
- Department of Mechanical Engineering, Jalojai Campus
- Department of Industrial Engineering, Peshawar Campus
- Department of Industrial Engineering, Jalojai Campus
- Department of Mechatronics Engineering, Peshawar Campus
- Department of Chemical Engineering, Peshawar Campus
- Center for Advanced Studies in Energy, Peshawar

### Faculty of Civil, Agricultural & Mining Engineering

- Department of Civil Engineering, Peshawar Campus
- Department of Civil Engineering, Jalojai Campus
- Department of Civil Engineering, Bannu Campus
- Department of Mining Engineering, Peshawar Campus
- Department of Agricultural Engineering, Peshawar Campus
- National Institute of Urban Infrastructure Planning, Peshawar
- Gems & Jewelry Center of Excellence, Peshawar Campus
- Earthquake Engineering Center, Peshawar Campus

### Faculty of Architecture, Allied Sciences and Humanities

- Department of Architecture (Abbottabad Campus)
- Department of Basic Science & Islamiyat, Peshawar Campus

## Foreign Academic Linkages

UET Peshawar is actively engaged with foreign and local institutions with the aim to promote academic collaborations. With the following institutions, we are collaborating, through faculty, students exchange and joint research projects.

### International Academic Linkages



### National Academic / Industrial Linkages



#### International Academic Linkages

University of Malaya Kuala Lumpur, Malaysia  
University of Glasgow, UK  
XI'An University of Technology, China  
Nanjing University of Information Sciences & Technology, China  
Southeast University Nanjing, China

#### National Academic / Industrial Linkages

All Pakistan Commercial Exporters Associations (APCEA)  
PDA  
Karakoram International University  
Concave Agri Services Private Limited  
REVGREEN Pakistan  
GIKI, MUET Jamshoro, QUEST Nawabshah  
FATA University  
Sarhad Chamber of Commerce & Industries, Peshawar  
BARG Engineering  
Green Wend Energy Peshawar

Ayub Teaching Hospital (MTI) Abbottabad  
Khwendo Kor  
SIMBRI Construction Solution  
Ideagist  
Rozee Pakistan  
Pavercraft PVT, Ltd  
Rainmakers  
The Agriculture, Live Stock, Fisheries Dept, KP  
University of Agriculture, Peshawar

## University Events

## CONVOCATION 2024

480 degrees conferred upon the graduating students

The Convocation 2024, UET Peshawar was held on 7th March, 2024 at the Convocation Hall University of Peshawar to commemorate the academic accomplishments of graduating students for the academic session, 2023. The Chancellor / former Governor Khyber Pakhtunkhwa Haji Ghulam Ali conferred degrees upon the successful graduating students in presence of members of Syndicate, Deans, heads of different departments, faculty and parents. In total, 480 graduates were conferred degrees in engineering and non-engineering programs including 444 B.Sc. degrees, 08 Ph.D. degrees and 28 M.Sc. degrees. At the Convocation, 20 Gold Medals were also conferred upon graduates who achieved top positions in their relevant technologies while a

cash prize of Rs. 100,000 was awarded to the topper of Department of Electrical Engineering Engr. Momina Naveed by the Fast Cables Ltd.

The Vice Chancellor UET Peshawar Prof. Dr. Qaisar Ali congratulated the graduates and their parents on their marvelous achievements. Vice Chancellor University of Agriculture Prof. Dr. Jahan Bakht, Former VC UET Peshawar Prof. Dr. Iftikhar Hussain and senior faculty members officials of UET Peshawar were also present on the occasion. After the formal ceremony, the graduating students celebrated their achievement with their families and peers.

**IMechE UET Student chapter launched at UET Peshawar**

The Institution of Mechanical Engineers (IMechE) inaugurated its Student Chapter at UET Peshawar on July 6th, 2023. The IMechE Student Chapter is an exclusive platform established by UET Peshawar aimed to cultivate collaboration, facilitate the exchange of knowledge and provide avenues for professional growth for mechanical engineers across various domains. The grand opening ceremony stood as a remarkable testament to the society's noble objective of propelling engineering practices forward and instigating

profound transformative shifts within the industry. Prof. Dr. Khizar Azam Khan, Registrar UET Peshawar was the chief guest. He urged the students to partake in both national and international endeavors, emphasizing the invaluable learning experiences and opportunities for personal growth that such involvement brings. Dr. Rizwan M. Gul Chairman, Department of Mechanical Engineering / Patron In-Chief also addressed the audience and highlighted the significance of nurturing students' technical skills through active participation in society. Prof. Dr. Abdul Shakoor (Advisor of the IMechE



Student Chapter) said, a new era of collaboration and advancements in engineering has begun with the launch of the IMechE Student Chapter. Dr. ArshadMehmood (Co-advisor) also shared the overarching aim of the IMechE Student Chapter and elucidated its mission in promoting growth and development in the field.

## Alumni Students Financial Assistantship Program (SFAP) Ceremony

A cheque distribution ceremony was held on July 19th, 2023 under the UET Alumni Students Financial Assistantship Program (SFAP) on a merit cum need basis. The scholarship cheques were distributed among 20 students of UET Peshawar who were selected through a fair interview process. The event was attended by Engr. Gul Bahadar Yousafzai, President UET Alumni Association; Engr. Sher Bahadar Marwat, Vice President UET Alumni Association; Prof. Dr. Abdul Shakoor, Secretary Finance UET Alumni Association; Prof. Dr. Gulzar Ahmad, Advisor Student Affairs; and Mr. Rizwan, Assistant Student Affairs Office.



## Prof. Dr. Farid Ullah Khan, UET Peshawar Nominated for the Top 2% Scientists in the World – Stanford University and Elsevier List 2023

Prof. Dr. FaridUllah Khan, Department of Mechatronics Engineering, UET Peshawar was nominated for the prestigious World's Top 2% Scientists list, published by the Stanford University, USA and Elsevier, a global information analytics company. The Top 2% Scientists list is a respected resource for recog-

nizing the most prominent scientists in their fields globally. The list is based on data from Scopus, the world's largest abstract and citation database and includes scientists from all fields of research. The selection is based on a composite indicator called the c-score, which considers several factors, including the number of citations a scientist has received, the h-index, and the field-normalized citation impact. The c-score is a comprehensive measure of scientific impact than traditional metrics, such as, the total number of citations for a particular research publication.

Prof. Dr. FaridUllah Khan is the founding director of the “Sensor and Energy Harvesting Systems Research Lab”. An eminent academic expert and administrator, Dr. Farid has expertise in energy, energy harvesting, renewable energy, mechatronic systems and machine health monitoring.

## DCSE Orientation

UET Peshawar welcomed the new comers on Orientation programme for the academic session 2023-24, arranged at their respective departments on 11th October, 2023. The comprehensive orientation programme provided networking opportunities by meeting with faculty and peers aimed to know about campus life, academic activities and guidance over facilities and support services.

## Afghan delegation Visits UET Peshawar

The official Afghan delegation, headed by Dr. Nazar Muhammad Irfan, Director of Foreign Affairs and Scholarships, Ministry of Higher Education, Afghanistan including Afghan officials from the Afghan International Islamic University (AIU) accompanied by Mr. Jehanzeb, Project Director HEC and Mr. Mujahid Aziz, Project Manager, HEC visited UET Peshawar on October 13, 2023. The purpose of the visit was to see opportunity for initiating the joint faculty exchange program with the Afghan International Islamic University. Dr. Rafiullah Atta, Chancellor of AIU said, the visit is aimed to build institutional linkages with the



leading Pakistani universities particularly in engineering and technology as AIU needs foreign faculty from Pakistan to teach MS and Ph.D. level courses to reduce the faculty gap resulted after the US exit from Afghanistan. The delegates affirmed that Pakistan and Afghanistan's collaboration in higher education would further strengthen this relationship through faculty exchange. The delegates were keenly interested to develop cooperation for faculty exchange program and research collaborations with UET Peshawar. Prof. Dr. Iftikhar Hussain, Former VC assured every possible support that might be helpful for AIU in the fields of Mining, Agriculture and Structural Engineering running under the supervision of qualified Ph.D. faculty and state-of-the-art laboratories. UET Peshawar has already enrolled 200 Afghan students at its undergraduate and postgraduate programs. The Government of Pakistan has specifically directed HEC to establish collaborations in Higher Education in Afghanistan after visiting the leading education institutions. HEC would enter into a larger agreement where a consortium of Pakistani universities would work together with AIU in faculty exchange.

## GIKI holds S&T Award Ceremony

The Science and Technology (S&T) Award Ceremony was held at GIKI Swabi on 24th, October. The event recognized outstanding achievements in the fields of undergraduate research support, master student



ships and the network of high-tech equipment program. The ceremony was attended by the supervisors of the projects UET Peshawar nominated for awards, including Dr. Haider Zaman, Dr. Anees Ullah, Dr. Kareem Akhtar, Dr. Iftikhar Ahmed, Dr. Arshad Mehmood and Dr. Tufail Habib. Additionally, the Director ORIC, UET Peshawar and his team was present to witness this significant occasion.

The awards were presented by Dr. Najeebullah, former Provincial Minister for Science, Technology and IT, Sports and Youth Affairs, Khyber Pakhtunkhwa and a distinguished panel of guests.

## Graduation ceremony for Afghan National students held

A graduation ceremony for Afghan National students studying under the Allama Iqbal scholarship program, Higher Education Commission (HEC), Pakistan was held at HEC Auditorium, Islamabad on 2nd November 2, 2023. A total of 44 Afghan National Students of postgraduate and undergraduate programs graduated from Peshawar also participate in the ceremony. Prof. Dr. Misbah Ullah, Treasurer UET Peshawar and Dr. Amad Ullah Khan, Chief Proctor also attended the ceremony. Mr. Madad Ali Sindhi, Minister for Federal Education and Professional Training while addressing as chief guest the graduation ceremony for 281 Afghan students who have completed their studies under Phase-II of the programme also announced the launch of the 3rd phase of Allama Muhammad Iqbal Scholarships Programme for Afghan Nationals. Under this new phase, 4500 scholarships will be awarded to Afghan students over a period of three years to study in top-ranked Pakistani universities. As many as 6000 Afghans students have been awarded scholarships so far during first two phases of the scholarship project. Chairman HEC Dr. Mukhtar Ahmed and Special Representative on Afghanistan (SRA), Ministry of Foreign Affairs, Mr. Asif Durrani also graced the occasion.



## The Daze of Thunder Brings Accolades Home

A first ever three-day Piston Cup competition 2023 was held at NUST, Islamabad from November 17 - 19, 2023. The competition replicated the Piston Cup competition which is held at USA every year. Teams from all over the country including NUST, IIUI, BEHRIA University, UET Taxila, AIR University, IST



and UET Peshawar participated in the competition. The teams presented their designed and fabricated buggies for various on-ground tests. The UET Peshawar, Mechanical Engineering Department team "DAZE OF THUNDER" including Fahad Nawaz, Insha Khan, Umer Habib, Asim Akram and Inza Tanvir under the supervision of Prof. Dr. Afzal Khan and Engr. Muhammad Arsalan Khan took part in the competition and declared the overall winner of Piston Cup competition 2023. The team was awarded with a cash prize and the Piston Cup. The team also grabbed the Best Suspension, Best Acceleration and the Best Design awards.



## Final Year Project Exhibition 2024

The Department of Computer Systems Engineering organized the final year project exhibition on January 31, 2024. The projects, supervised by Dr. Rehmat Ullah Khattak showcased the concepts of Digital Logic Design and its applications in electrical and computer engineering especially in developing cell phones, computers, and related personal electronic devices. Prof. Dr. Laiq Hassan, Chairman, Department of Computer Systems Engineering inaugurated the exhibition. , Prof. Dr. Waqar Shah, Dean, Faculty of Electrical and Computer Engineering visited the stalls and commended the students for their outstanding projects. Faculty members of DCSE and related departments alongwith a large number of students attended the exhibition.

## EUTA Cabinet takes Oath

The oath taking ceremony of Engineering University Teachers Association (EUTA) was held on February 20, 2024. The Vice Chancellor Prof. Dr. Qaisar Ali administered oath from Mr. Amir Taj (Department of Computer Science & IT) as President, Prof. Dr. Zahid Wadood Mufti as Vice President, Dr. Atif Sardar as General Secretary, Dr. Ehtiram-ul-Haq as Joint Secretary and Engr. Adnan Rasheed as Joint Secretary. The executive body also took oath on the occasion.

## ASME EFX 2024

The ASME EFX 2024 was organized by ASME, UET Peshawar chapter, in collaboration with Matrix Pakistan under the supervision of Dr. M AlamZaib Khan, Department of Mechanical Engineering from 24th -25th February, 2024. Prof. Dr. Hamidullah, Chairman, Department of Mechanical Engineering, UET Peshawar was the chief guest of the opening ceremony. The event brought together students from various backgrounds and disciplines to showcase their technical skills, build a community and foster relationships. The event included various competitions such as Students Design Competitions (Robotics Competition), IAM3 (Drone Rules) oral competitions, technical poster painting competitions and elevator pitch competitions, designed to challenge the students and push them to reach their full potential. Leading universities from all over Pakistan participated in the event included NUST Islamabad, NED Karachi, COMSATS Islamabad, UET Lahore, UET Taxila and UET Mehran.

The event also included interactive seminars on " Emerging Technologies: Shaping our Future and Career Prospects" by Dr. Nasru Mina Ullah and "Sus-



tainable Sparks: Illuminating Energy Conservation with Green Nudges" by Prof. Dr. Abdul Shakoor. Later on, an Urdu-Pashto Mushaira was also arranged presided by renewed Pashto poet Dr. Abaseen Yousafzai. The event was an amalgamation of passion for engineering and commitment to pushing the boundaries of what is possible evident through different skills and knowledge.



## Buildings Energy Research Center Inaugurated at UET Peshawar

In a significant move towards enhancing national capabilities towards energy conservation in buildings, the Vice Chancellor Prof. Dr. Qaisar Ali inaugurated the Buildings Energy Research Center (BERC) on 28th February, 2024 in presence of officials from NEECA and GIZ. The Center is a joint venture of UET Peshawar and National Energy Efficiency & Conservation Authority (NEECA), Islamabad, funded by the German Federal Ministry for Economic Cooperation and Development through GIZ Pakistan. The Center is a leading research hub to focus its energy conservation efforts to the "Building Sector", aimed at developing innovative approaches to optimizing building performance through latest research and best practices from across the world. The Center will encourage designs that reduce energy consumption based on sustainability, low cost of housing sector and renewable energy sources. The BERC will have a multidisciplinary approach which will engage researchers and experts from other engineering disciplines as well to provide smart and intelligent solutions to the society through accurate data acquisition and technology. Muhammad Irshad, Project Manager, GIZ appreciated the efforts of UET Peshawar for showing up the best results in its already funded project, "energy management of municipalities", carried under CISNR. The senior officials from GIZ including Alexander Fischer Senior Technical Energy Advisor, Dorje Lama Project Manager GIZ and Mohammad Mashood Energy Advisor NEECA were present on the occasion.

## Student Service Center Inaugurated at UET Peshawar

The Minister for Higher Education Khyber Pakhtunkhwa Meena Khan inaugurated the Student Service Center on March 25, 2024, the newly established one stop solution

equipped with modern technology to facilitate the students in their academic matters such as transcripts, course registration and degree clearance etc. The Minister Higher Education was received by



the Vice Chancellor Prof. Dr. Qaisar Ali who apprised him of his vision to facilitate the students on top priority with his student centric approach. The SSC will be equipped with modern technology to reduce the wait time and well trained staff. The Deans, senior faculty and administration were present on the occasion. Mr. Meena Khan said that promoting engineering education and facilitating the students to the remote areas of KP is a sacred mission of UET Peshawar which is appreciable.

## Youth Robotec'24

The Youth RoboTec' 24, organized by the National Center of Robotics and Automation UET Peshawar was held from (DATE)?, gathering over 500 participants from education institutions across Pakistan including COMSATS, Air University, GIKI, UET Taxila, HITECH University, Hazara University, and many others. The event included various competitions and recreation activities and a two-day STEM workshop with free of cost registration for the students in the newly emerged districts. The YRT 2024 is being held in joint collaboration with the Directorate of Science and Technology (DOST) Khyber Pakhtunkhwa, Directorate of Youth Affairs, Khyber Pakhtunkhwa, Bank of Khyber, UBL and



Storm Fiber Ltd. Mr. Abdul Karim Tordher, Special Assistant to C.M Khyber Pakhtunkhwa for Industries & Commerce & Technical Education appreciated the efforts of UET Peshawar for organizing the event for the last three years. The YRT24 was aimed to empower young minds and pave the way for a brighter future in robotic by offering a platform for young people to get closer to science, make breakthroughs and exercise their minds. He said, the partici-

pants' creativity will be enhanced in the event, bringing in new momentum and perspective to the development of robotics. The event also included a myriad of engaging activities and competitions, from the adrenaline-fueled Robo War and Mini Robo War to the strategic Sumo Wrestle and the thrilling Off-road RC racing. The closing ceremony was graced by Provincial Minister for Higher Education, Achieves and Libraries Mr. Meena Khan Afridi distributed prizes and shields among the winners. Also in attendance were Mr. Sajid Shah, Director General of Science & Technology (Dost), along with other government officials and a large number of faculty members. Dr. Muhammad Tahir Khan, Chairman of the Department of Mechatronics and Lab Director of Advanced Robotics and Automation Lab ARAL UET, Peshawar, expressed gratitude to Minister Meena Khan for his interest and support.

## The Career Excellence Academy Inaugurated

The Vice Chancellor Prof Dr. Qaisar Ali inaugurated the Career Excellence Academy at UET Peshawar on May 22nd, 2024 in presence of Deans and senior officials the other day. The Career Excellence Academy is aimed to offer short professional and skilled-based courses for the professionals and students aspiring for admissions to the B.Sc. Engineering and other professional degrees. He said, academic learning is crucial for achieving excellence at par in later years whether they are taking admissions in professional education or improve their skills of in service graduates because upto date knowledge and the right skills are required for continuous professional development. The courses are designed with the expertise of top course instructors, will serve as a first step to excel in their academic and professional careers. These courses are aimed to achieve remarkable results in both academic and technical skill outcomes.

The UET CEA offers the best learning environment with fully-equipped air conditioned classrooms at its Peshawar Campus during the summer vacation. Special transport service as well as boarding facility will also be available to both male and female students. Such facilities are aimed to facilitate the female students especially to study in a secure and stress free environment of university.

## PEAS faculty and students Visited the Department of Electrical Engineering

A team of Electrical Engineering students from PIEAS, Islamabad visited the Department of Electrical Engineering, UET Peshawar on June 7, 2024 to conduct laboratory tests in High Voltage Engineering in the HV lab. The Dean, Prof. Dr. Syed Waqar Shah and Prof. Dr. Gulzar Ahmad, Chairman, Department

of Electrical Engineering warmly welcomed the students. Prof. Dr. Muhammad Naeem Arbab, guided and demonstrated the experiments to the students.

## Denmark's Ambassador Visited UET Peshawar

Denmark's Ambassador to Pakistan, H.E. Jakob Linulf, visited UET Peshawar on the invitation of Denmark alumni at UET, Peshawar, Pakistan. Dean MCI, Prof. Dr. Sahar Noor, and Registrar Dr. Khizar Azam welcomed the Ambassador on the university's academic/research pursuits and discussed opportunities for joint research projects to initiate collaboration between UET Peshawar and Danish institutions. Dr. Tufail Habib, Department of Industrial Engineering Department and Dr. Aamir Saeed, Department of Computer Science, Information Technology Jaloza Campus who are the alumni of Aalborg University, Denmark met with the Ambassador and discussed opportunities to promote a strong bond among Denmark alumni in Pakistan and integrate them into the local academic and research community particularly in green projects, aimed at enhancing resilience to climate change in both countries. Given Denmark's leadership in carbon neutrality and its advanced solutions in renewable energy, water management, and livability, sustainable technologies, the exchange of ideas hold significant potential for driving sustainable development and innovation in Pakistan.





## Seminars / Workshops / Conferences

### Seminar on "Extreme Loading on Structures"

A one day seminar on "Extreme Loading on Structures" under Higher Education Commission of Pakistan funded research project "Performance Evaluation of Brick Masonry Systems under Blast Loadings" was held on July 7th, 2023. The seminar was organized by Prof. Dr. Amjad Naseer and Prof. Dr. Muhammad Ashraf, Department of Civil Engineering, UET Peshawar. The seminar was focused on extreme loading on structures specifically due to blast loading, field testing of masonry systems against blast loading and the corresponding numerical study.



Prof. Dr. Amjad Naseer, Principal Investigator of the Project informed that the project is funded by HEC through its flagship Research Program National Research Program for Universities (NRPU). He highlighted the significance of the project in the backdrop of spread of terrorism spell in Pakistan after the eventful incident of 9/11. The terrorist targeted thousands of unmanned primary school buildings in Khyber Pakhtunkhwa. Consequently, the country especially Khyber Pakhtunkhwa incurred severe financial losses and the education process was disrupted. The accentuated losses are mainly accrued due to prevalent conventional gravity design which could not cater against blast loading. He underlined that the project has two phases including Lab testing of materials which is almost completed while the second phase is field testing

of masonry systems against blast loading which is going to be conducted in near future. He told the audience that after completion of the project, guidelines will be developed for the masonry structures in terrorist prone regions of Pakistan

### Seminar on "Unleashing the Power of Digitization for Municipal Energy Efficiency"

A one-day seminar on "Unleashing the Power of Digitization for Municipal Energy Efficiency" organized by CISNR UET Peshawar and GIZ through its REEE SCALE project was held on 18th July, 2023 at the Islamabad Club. Prof. Dr. Gul Muhammad Khan, Director CISNR briefed the audience about initiatives taken for digitization of eight municipalities in terms of their water supply systems, street Lights systems and Fleet/Fuel tracking systems for energy efficiency with the help of GIZ REEE SCALE Project, The project already has started to show visible improvement in terms of reducing energy loss in the selected municipalities as validated by the concern municipal authorities. He said through this project three SDGs including 7, 11 and 13 are addressed holistically.

The chief guest, Dr. Sardar Mohazzam, Managing Director, National Energy Efficiency & Conservation Authority (NEECA), Islamabad highlighted the importance of accurate data for ensuring transparency and accountability. He





said, the Government has ensured reforms in automation and standardization of energy appliances, but real challenge is enforcement of such reforms. He urged the need to create awareness on the use of digitization in energy sector and simplifying the processes in automation field.

The panelists highlighted the need for awareness and changing the attitude and mindset of government sector towards adapting to the changing times, finding opportunities from international partners such as GIZ collaborated with CISNR, showing the real pilot projects are needed for up scaling the projects. They also highlighted the need for sustainable and reliability of accurate data and training the Human Resources towards automation of energy through stakeholder engagement.

At the end, Prof. Dr. Gul Muhammad Khan, Director CISNR recommended for setting up municipal energy efficiency portal having integrated links with funding agencies; showing up bigger pilot projects with financial assistance of funding agencies, awareness and incentivize for trained professionals in SCADA to reduce resistance and encourage data transparency.

### **Seminar on “Computational Modelling of Isotropic and Composite Materials Using Both Finite Element and Meshless Methods”**

ORIC UET Peshawar in collaboration with Faculty of Architecture, Allied Sciences & Humanities UET Peshawar organized an event on July 21, 2023 where Dr. Zahur Ullah, Lecturer and Stage-2 Advisor of Studies, from School of Mechanical and Aerospace Engineering, Queen's University Belfast, United Kingdom (UK), also our Alumnus delivered a Lecture on "Computational mod-

elling of isotropic and composite materials using both finite element and meshless methods".

The talk was designed to give in-depth view with focus on future trends and challenges faced by scientists both in developed and developing countries. Large number of participants including Professors, scientists and students have showed interest in his talk and raised several questions which Dr. Zahur Ullah responded in a convincing manner. Prof. Dr. Siraj Ul Islam, former Dean Faculty of Architecture, Allied Sciences & Humanities UET Peshawar welcomed participants and appreciated the guest speaker who travelled from UK and spared his precious time for UET Peshawar researchers and students.

### **Seminar on “Role of AIOT in Municipal Energy Management”**

A one-day seminar on "The Role of AIoT in Municipal Energy Management" organized by the Center for Intelligence System Network Research (CISNR) UET Peshawar and GIZ through its REEE SCALE project was held on August 31st, 2023. The seminar was aimed to explore the potential of using the AI to perform intelligent tasks with the help of artificial intelligence in municipal energy management. Prof. Dr. Gul Muhammad Khan, Director CISNR while giving the project background said, CISNR is actively working with UNICEF, Google and GIZ since its inception and addressing 14 SDGs under the UN Agenda 2030. He said, by leveraging AI as a tool to analyze the vast amount of IoT data available through SCADA system installed in various municipalities, it will offer new opportunities. "Started with the digitization, we may use AIoT to accurately determine energy demand on transmission grid and distribution lines that greatly helps in proper management of electricity", adding, "It



will also open up new opportunities to effectively design the signature product, "Smart Meters" developed by CISNR which has provided the smart meters to the Power ministry at a very low cost, unmatched as compared to other countries. Mr. Qazi M. Naeem, CEO PEDO addressed the audience as chief guest. He said, CISNR is a success story of UET Peshawar in developing stronger academia - government linkage. He further informed that PEDO is not in loss, added, PEDO has got the approval of significant projects for the next ten years to generate upto 10k mega watt power projects to be added to the national grid in Khyber Pakhtunkhwa with having surplus electricity in the coming few years.

Prof. Dr. Iftikhar Hussain, Former VC said, technology is never accepted easily in developing countries so we have to change our mindset. He said, CISNR has developed a highly effective technology for energy efficiency of municipalities with the financial support of GIZ and supervisory support of the National Energy Efficiency & Conservation Authority (NEECA). The policy recommendations will be shared with NEECA for implementation of energy management across the country. At the end, the chief guest presented awards of excellence to the government representatives for their best performance on installing SCADA system in their settings.

## **Seminar on "Impact of Digitization on Municipal Energy Management"**

A one-day seminar on "Impact of Digitization on Municipal Energy Management" was successfully conducted in Lahore on September 14, 2023, benefiting 100 mid-level staff participants from various municipalities across Punjab. The event was funded by REEE-SCALE, GIZ and implemented by the Center for Intelligent Systems and Networks Research (CISNR). Dr. Gul Muhammad, Director CISNR, enlightened the audience about the project's primary focus on implementing the SCADA System in targeted municipalities across KP and Punjab. In the event, he emphasized that strengthening the local energy management industry can create job opportunities for the youth and play a pivotal role in mitigating Pakistan's ongoing energy crisis. Mr. Detlef Borst, GIZ consultant, emphasized the importance of implementing digitalization in a sustainable manner. Moreover, the panelists emphasized the need for public acceptance of new technology and consistent energy efficiency standards, regardless of changes in government.

## **Seminar on "Raising Awareness & Breaking The Stigma"**

The ORIC, UET Peshawar in collaboration with the Department of Psychology, University of Peshawar organized a one-day seminar on "Mental Health



Awareness" on 3rd October, 2023. The aim of the seminar was to increase students' awareness about mental health and reduce the stigma associated with mental illness. The key speaker of the session was Mr. Ilyas Ali Shah, Department of Psychology, University of Peshawar. Being your true self is one of the strongest components of good mental health. A large number of students participated in the event. At the end, Q&A session was held where they shared their mental health experiences.

## **Awareness seminar on "Drug Abuse Prevention and Control"**

UET Peshawar in collaboration with the Narcotics Control Wing (NCW) of the Excise, Taxation and Narcotics Control Department organized an awareness





seminar on “Drug Abuse Prevention and Control” among youth and students on 17th October, 2023. The event was organized by ORIC, UET Peshawar. The officials from Narcotics Wing, Taxation and Narcotics Control Department including Mr. Aftab uddin, Director NCW, Mr. Yousaf Karim, Director Administration, Mr. Masud-ul-Haq, ETO Rehabilitation and Dr. Hameed, Inspector NCW delivered speeches on drug abuse in society at large and among students in particular.

The officials of Excise, Taxation and Narcotics Control Department expressed their gratitude to the UET Peshawar administration for organizing such a productive session. Dr. Amad Ullah Khan, Chief Proctor, UET Peshawar, extended his appreciation on behalf of the UET Peshawar administration for the efforts of the Narcotics Wing, Excise, Taxation, and Narcotics Control Department in spreading the awareness in educational institutions to promote a healthy society. A large number of students attended the seminar.

### **Seminar on “Transformative Impact of 'Energy Efficiency through Digitization' Project”**

The CISNR, with the support of GIZ Pakistan, recently hosted an impactful seminar 20th December, 2023 centered on the project titled “Energy Efficiency through Digitization.” The seminar drew over 130 participants, having presentation from CDA, PDA, Tehsil Municipal Administration, Water Sanitation Services Company and others. It served as a focal point for discussions on energy savings, policy recommendations, carbon credits, and exemplary case studies from partner municipalities under the project. Muhammad Irshad, Project Manager at GIZ, commended CISNR's exceptional work in energy management and AIoT. Deputy Manager Ayaz Durrani from WSSC Abbottabad shared a compelling case study on how the implementation of Supervisory Control and Data Acquisition (SCADA) technology led to the detection of billing anomalies, resulting in substantial cost savings. This highlighted the practical impact of technological integration in utility management. Deputy Director Abdul Qadir Afridi of the Peshawar Development Authority (PDA) emphasized a significant shift in their energy management approach. He highlighted the transformation from a lack of awareness to successfully implementing an integrated energy team across critical sectors such as water supply, street lighting, and buildings.

### **Seminar on “AIoT in Municipal Energy Management”**

The CISNR, in collaboration with GIZ Pakistan, organized a pioneering policy seminar at Ramada Karachi under its project “Energy Efficiency through

Digitization.” The seminar brought together experts and leaders to address Pakistan's urgent need for effective municipal energy management in combating the evident impacts of climate change. Ms. Stoyanka Stich, Cluster Coordinator for Climate Change & Energy at GIZ, emphasized the urgency of energy management in mitigating climate change effects, underlining its critical contribution to fostering a cleaner and greener environment. During the seminar's panel discussion, prominent figures and industry experts, such as Deputy Mayor Sukkur Arshad Mughal, Chairman District Council Kashmore Gul Muhammad, Deputy Director of the Karachi Water & Sewerage Services Improvement Project (KWSSIP) Zafar Iqbal Qazi, and General Manager of K-Electric, Adnan Ali, actively engaged in deliberations on key policy options. In a strategic move towards enhancing the skills and knowledge of Superintending Engineers (SEs) in the Government of Khyber Pakhtunkhwa, the Pakistan Provincial Services Academy (PPSA) initiated its 1st Senior Management Course (SMC).

### **Seminar on “GHAR”**

The United Nations Office for Project Services (UNOPS) in collaboration with the Department of Civil Engineering organized a one-day seminar on December 20, 2023. The seminar titled, “GHAR: Green Housing, Affordable, Resilient; Challenges and Opportunities” draw together diverse audience of practicing engineers, architects, town planners, policymakers, and stakeholders from the construction industry to raise awareness among stakeholders about the critical need for climate-resilient and environmentally sustainable practices in construction. The event was aimed to inspire and empower professionals in the field to adopt practices that are not only environmentally



friendly but also economically viable. Mr. Brian Fawcett, Country Manager UNOPS Pakistan as chief guest highlighted the role of UNOPS in enhancing the technical capacity of the Government of Pakistan in designing, constructing, and managing climate-resilient housing. Mr. Fawcett commended the Department of Civil Engineering and Earthquake Engineering Centre, UET Peshawar for their efforts in developing a Seismic Building Code and other research relevant to the project.

## Awareness seminar "Plant Today, Breath Tomorrow"

The Gym Club UET Peshawar organized a Plantation Drive titled "Plant today, Breath tomorrow" under the Prime Minister's Green Youth Movement, on 23rd February, 2024. The chief guest of the drive was Prof. Dr. Sahar Noor, Dean, Faculty of Mechanical, Chemical and Industrial Engineering, UET Peshawar. The chief guest commenced the drive by planting a sapling with new administration block. Prof. Dr. Syed Waqar Shah, Dean, Faculty of Electrical Engineering,



## Seminar on "Drug Addiction Awareness"

A seminar on "Drug Addiction Awareness" was arranged by the Anti-Narcotics Student Society UET Peshawar in joint collaboration with the Fazaia College of Education for Women (Peshawar Campus) on May 15, 2024. The seminar was aimed to spread awareness amongst the students about drugs addiction and fierce enforcement of the Excise, Taxation and Narcotics Control Department, KPK through the Khyber Pakhtunkhwa Control of Narcotic Substances (CNSA) Act 2019 for countering the supply of narcotics. Miss Nida

Syed Clinical Psychologist, Lecturer FCAW and Mr. Sofiyan Haqqani Director Excise, Taxation and Narcotics Control, KPK were the guest speakers for the seminar. The speakers deliberated over the psycho physiological aspects of drugs abuse and addiction, especially in youth. Dean MCAI, Prof Dr. Sahar Noor assured that UET Peshawar is following the HEC's Anti Drug policy for education institutions while mechanisms are in place to ensure its proper implementation in hostels and university premises.

## Seminar on "AI Fusion: Academia and Industry Perspectives"

UET Peshawar conducted a one day seminar on the "AI Fusion: academia and industry perspectives" on May 15th 2024. The summit brought together experts from industry, academia, and the public sector to exchange views on AI and its impact on education. Artificial Intelligence has brought another revolution across the world. The countries who are benefiting from this technology have worked hard to acquire this knowledge and we should follow the same path to implement it in our education institutions. Engr. Javed Saleem Qureshi Ex-Chairman PEC was the chief guest. The seminar was a part of series started in 2022 has been conducted in various engineering universities across the country with the aim to sensitize the academia and industry for getting clarity of vision to adopt AI as a force for good, enhancing human capabilities and enriching lives. He cited the UN report that the market for artificial intelligence (AI) is expected to show strong growth in the coming decade. Its value of nearly 6 trillion dollars is expected to grow upto nearly 18 trillion U.S. dollars by 2030, so it is incomparable in terms of investment and getting unexpected results.





Prof. Dr. Fazal Ahmad Khalid Rector GIKI said, this is the right time to align our education system with global standards by embracing modern techniques. As academia, we need to understand the importance of this field as compared to earlier ones. He said, the curriculum taught in engineering universities is very rigid and now is the time that the Government should make changes, based on industry's demands to get the desired skill set from universities. Prof. Dr. Abdul Shakoor, Department of Mechanical Engineering UET Peshawar said, the education institutions are responsible to exploit the technology in AI, IoT, data science which are connected to each other and this connectedness has gathered us all today for holding the seminar series across the leading engineering universities of Pakistan.

## **Seminar on "Climate Change in Water Resources of Pakistan: Challenges and Opportunities"**

A one-day seminar on "climate change in water resources of Pakistan: Challenges and opportunities" was held on May 31, 2024. The seminar was organized by the Department of Agricultural Engineering UET Peshawar. The Chairman Prof. Dr. Zia ul Haq while opening the seminar said, as part of outreach programme the seminar was aimed to create awareness on climate change and share the latest trends on climate change impact mitigation and adaptation strategies with young researchers and academicians. Engr. Muhammad Nawaz, Water Resources Management Specialist USAID, with thirty years of field experience in water resource management and Alumnus of Department of Agricultural Engineering was the guest speaker.

Pakistan is blessed with a unique geographical location with a vigorous monsoon system and a robust network of rivers however, climate changes over the last few years have put the country at risk especially the water resource management systems. There is a need to adopt different approaches to put the country out of water crisis as it was noticed in South Africa in 2018 when the country reached to "zero day". He said, Pakistan has more 8 % water resources for 1 percent of population as compared to China. India and other South Asian countries, but the question is how Pakistan can transform the massive blue potential into blue economy.

The speaker highlighted the need for including climate change as an essential factor in project designing analysis and part of curriculum of agricultural engineering education. He stressed the young researchers to come up with practical and market driven research so that development sector would work jointly and support them. Dean Basic Sciences Prof Dr.Sirajul Islam appreci-

ated the efforts of Department of Agricultural Engineering for holding a seminar on an important issue.

## **CDC holds session on Corporate Leadership: Experience Based Perspective" for the graduating students**

The Office of Career Development Center organized a session on "Corporate Leadership: Experience Based Perspective" for the final year students and faculty at the video Conference Hall. The speaker of the session was Mr. Adil Khattak, Chief Executive Officer, Attock Refinery Limited. Mr. Adil Khattak has a vast experience in the field of engineering, maintenance, human resource management, project management and marketing. The chief guest of the event was Chairman FF Steel, Senator Nauman Wazir Khan who shared his experience with the students and faculty.



## **Prof. Dr. Faridullah Khan conferred with the prestigious "Quaid-e-Azam Gold Medal**

Prof. Dr. Faridullah Khan Secreatry BOASAR was conferred with the prestigious "Quaid-e-Azam Gold Medal" by the Istehkam-e-Pakistan Foundation for rendering meritorious services in the field of research and education. The event was organized by the Istehkam-e-Pakistan Foundation at the e-library Lahore. In the ceremony, Quaid-e-Azam gold medals, Sitara-e-Pakistan Medals and awards were also awarded to 80 personalities who performed remarkable and valuable services in various fields of life including, education and teaching, medicine and social work.

## WORKSHOPS / CONFERENCES

### Workshop on “E-commerce, Amazon and Pakistan Trade Portal”

A one-day training workshop on “E-Commerce, Amazon and Pakistan Trade Portal” was held on July 17th, 2023, organized by the Gems & Jewellery Centre of Excellence (GJoC), UET Peshawar in collaboration with Trade Development Authority of Pakistan (TDAP) here today at the main Hall UET Peshawar.

The keynote speaker of the training was Mr. Zahid Muhammad, Deputy Director TDAP who highlighted the significance of the training. Dr. Khan Muhammad, Director GJoC, welcomed participants of the workshop and briefed the audience regarding the center's present facilities and future plans. He informed that the center has trained 628 and 190 students for the award of five months diploma in the field of gemology and lapidary respectively. Later on, two technical sessions were also arranged by Mr. Adil Mukhtar and Mr. Amir Khan, TDAP. Dr. Habib Ur Rehman, GJOC, Mr. Amjad Ali Instructor GJoC, experts of Gems and a large number of students were also present on the occasion.

### Workshop on “Professional Development”

The Professional Education Foundation (PEF) organized a one-day training workshop to the fresh graduates from different institutions at UET Peshawar on 26th August 2023. The training focused on four vital areas of professional development including Resume Writing, Interviewing Skills, Confidence Building and Communication Skills. The session, led by Mr. Danish Khan Yousafzai focussed on giving hands on practice to the participants. This initiative is part of PEEFA's professional development program to equip young individuals with essential interpersonal skills for excellence in for their achieving excellence in their careers.

### Workshop on “Local Needs Gap Analysis And Proactive National Disaster Preparedness And Response”

A one day workshop on “Local Needs Gap Analysis and Proactive National Disaster Preparedness and Response” in collaboration with NDMA, PDMA and UET Peshawar was held on September 11, 2023. The workshop was aimed to bring together experts and professionals to assess the policy gaps to garner global collaborations for innovative solutions for effective in all aspects of disaster management. Mr. JannatGul, DG PDMA, Peshawar emphasized over to create awareness on natural disasters, a unified response

is needed with the help of academia, government and civil society and data gathering mechanism to be determined the Public Sector Institutions for finding out real life solutions to the problems. The Vice Chancellor Prof. Dr. Iftikhar Hussain said that the Department of Civil Engineering and EEC UET Peshawar have worked with NDMA in the revision of seismic building code 2021 and helped the department towards developing seismic hazard map. The severe consequences of floods, earthquakes and climate change call for a unified response for mitigation and response for devising disaster management strategies. Prof. Dr. Khan Shahzada, Department of Civil Engineering, gave away a detailed presentation on UET Peshawar's role in disaster preparedness and response. Dr. Fazal Ahmad Khan, Rector GIK, Swabi urged for exploiting AI based solutions to deal with such challenges and create more awareness for policy making and engage academia to find out AI based solutions for a quick response and mitigate risks involved in Pakistan and the across the world. The workshop included thematic sessions in which participants from NDMA, UET Peshawar, KUST, CDPM (UoP), MCE Rasalpur, KUST, GIKI, Hazara University and Abdul Wali Khan University, Mardan participated and gave presentations on different area with respect to disaster management and collaboration.

### Workshop on "Improving Quality of Teaching in Engineering Education"

The Quality Enhancement Cell (QEC), UET Peshawar arranged a three days training workshop on "Improving Quality of Teaching in Engineering Education" from 20th-22nd September 2023. The training was aimed to provide updated knowledge on HEC guidelines on anti plagiarism and the best peda-



gical practices in engineering education to the young faculty. The resource persons of the workshop included Prof. Dr. Sahar Noor, Dean MCIE, Dr. Aziz Ullah, Assistant Professor, Department of Basic Sciences & Islamiyat, Prof. Dr. Hamidullah, Director Undergraduate Studies and Dr. Safdar Nawaz Khan, Director QEC.

### Workshop on “The Role of IoT in Municipal Energy Management” Empowers Municipal Administrators”

The CISNR organized a one-day workshop in Swat funded by the German Federal Ministry for Economic Cooperation & Development (BMZ) under its project REEE: SCALE, the workshop highlighted the crucial role of the Internet of Things (IoT) in Municipal Energy Management. Its primary goal was to raise awareness and share case studies illustrating how the integration of automated technology in municipal services can lead to reduced energy consumption and improved service delivery. Designed to empower municipal administrative staff, the workshop aimed to encourage the adoption of technological advancements such as Supervisory Control and Data Acquisition (SCADA) systems for water supply management, streetlight control, and fleet management. CISNR emphasized that the implementation of SCADA systems in municipalities is expected to deliver energy savings, reduce greenhouse gas emissions, and promote decarbonization. This, in turn, contributed to the advancement of Sustainable Development Goal 7, entitled, "Affordable and Clean Energy," and Sustainable Development Goal 13, which focuses on Climate Action.

### Consultative Workshop for the Project "Transformation of Construction Sector in Pakistan"

The inaugural consultative workshop for the project, "The Transformation of the Construction Sector in Pakistan: A Pathway towards Clean, Green and Sustainable Buildings", was organized by CISNR UET Peshawar on November 6, 2023 in Islamabad. The project is a joint venture of UET Peshawar and National Energy Efficiency & Conservation Authority (NEECA), Islamabad, funded by the German Federal Ministry for Economic cooperation and Development through GIZ Pakistan.

The chief guest, Dr. Sardar Mohazzam, Managing Director, NEECA said, NEECA had introduced the national Energy conservation code in 2011 but due to lack of awareness among the stakeholders including government, industry and academia, the code was not implemented properly. "We are now at a stage where NEECA has got the financial support of BMZ through GIZ, partners



including ABAD Builders, a major developer in construction sector in Pakistan that helped us in implementing it at the building design stage, he added. He further urged that future as well as the existing buildings in Pakistan need to have the "energy and building code" at the design stage and retrofiting mechanism, adding, NEECA has made it mandatory for the developers to get the energy conservation certificate for buildings. Dr. Naveed Ahmad, Project Lead and expert in energy building said, the project will take consultation from the stakeholders in future to develop an institutional technical framework for designing and implementing the national energy conservation building code 2023 in line with international practices and capacity building of professionals in the field of energy building.

### One-Day Workshop on "Glass Blowing Engineering"

The Scientific Instrumentation Center (SIC) in collaboration with the Department of Chemical Engineering organized a one-day workshop on "Glass Blowing Engineering" on November 6, 2023. Dr. Shahid Bashir, Director SIC in his address emphasized the importance of the glass industry and its potential as a source of revenue. Dr. Naseer Ahmed Khan and Dr. Syed Naveed-ul-Hassan, Department of Chemical Engineering presented the theoretical aspects of glass blowing engineering, the energy and fuel costs involved in glass processing. They





highlighted the importance of Glass materials used in laboratories and other places for various purposes. Later on, a visit was arranged for the participants of the workshop to Glass Blowing Lab where they gained hands-on experience in glass blowing. Dr. Misbah Ullah, Advisor Finance in his closing remarks emphasized the importance of such events in generating awareness and producing skilled lab personals in this important industry field. At the End, Dr. Misbah Ullah distributed certificates and shield among the participants and keynote speakers the participants of the workshop.

## Workshop on "Earthquake Engineering and Structural Dynamics"

The Swiss Government's visionary "Exploratory Mission to Pakistan in 2023" program has taken a significant leap forward with the joint organization of a groundbreaking workshop between Swiss and Pakistani Universities. In a strategic move to foster research collaboration, the Earthquake Engineering and



Structural Dynamics Laboratory at Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, the Department of Civil Engineering (CED) UET, Peshawar, Pakistan Science Foundation (PSF) and Pakistan Academy of Sciences (PAS) conducted a transformative workshop November 24, 2023, titled "Earthquake Engineering and Structural Dynamics", underscoring the commitment to advancing knowledge in seismic research and strengthening infrastructure resilience held on the other day at the esteemed Pakistan Academy of Sciences Auditorium in Islamabad. The workshop served as a pivotal initiative to connect researchers from Switzerland with prospective partners in Pakistan. The overarching goal was to deepen both personal and institutional ties, fostering a collaborative spirit between academic communities.

Researchers from Lausanne (EPFL), Switzerland, added a global perspective to the workshop by presenting in person. Renowned speakers included Dr. Igor Tomić EPFL (École Polytechnique Fédérale de Lausanne), Switzerland and Dr. Irshad Ahmad Chairman, Civil Engineering Department, UET Peshawar, Prof. Dr. Amjad Naseer, CED, UET Peshawar and Prof. Dr. Muhammad Usman, NUST Institute of Civil Engineering (NICE-SCEE).

## International Workshop on "Gemstone Identification, Certification and Cutting according to International Market"

A one-day International Workshop on "Gemstone Identification, Certification, and Cutting according to International Market" was organized by the Gem & Jewellery Centre of Excellence (GJoC) in collaboration with the National Productivity Organization, and the All Pakistan Commercial Exporters Association (APCEA). The workshop was held on April 26th 2024 with the aim to provide a platform to impart knowledge about Gemstone Identification, Certification, and Cutting according to the International Market. Vice Chancellor Prof. Dr. Qaisar Ali welcomed the participants from abroad and Pakistan. He said, "UET Peshawar is partnering with the Pakistan Commercial Exporters Association (APCEA) and the Export Promotion Board to establish a 'National Gemstone Certification Lab,' aimed at empowering gemstone traders with internationally recognized certifications." Mr. Thanong Leelawatanasuk, Deputy Director (Technical) Gem and Jewelry Institute of



Thailand (GIT) also spoke on the occasion. Dr. Surin Intayot, Assistant Professor GIT, and Ms. Supparat Promwongnan, Gemmologist were also present on



the occasion. Prof. Dr. Khizar Azam Khan, Registrar, UET Peshawar, Dr. Khan Muhammad, Director GJoC, Ehtesham Ullah Khan, Ex-Director GJoC, Dr. Habibur Rehman, GJoC, Mr. Wajih Abbasi, General Manager National Productivity Organization, Mr. Anwar Iqbal, MSME's, and Mr. Minhajuddin Sahib, President of the Pakistan Commercial Exporters Association (APCEA), were also present on the occasion.

## **Workshop on “Engaging Targeted Municipalities in Abbottabad and Mansehra”**

The workshop was aimed at engaging targeted municipalities in Abbottabad and Mansehra, Khyber Pakhtunkhwa on 26th September, 2023. These municipalities had witnessed successful implementation of SCADA system under CISNR guidance. The event was funded by REEE-SCALE, GIZ - Pakistan.

## **5th International Conference on "Sustainable Energy Technologies"**

The fifth two-day International Conference on "Sustainable Energy Technologies" was organized at the US Pakistan Center for Advanced Studies in Energy USPCAS-E UET Peshawar from December 14th to 15th, 2023. Dr. Syed Sarfaraz Ali Shah, Advisor to the Chief Minister Khyber Pakhtunkhwa for Planning & Development, Energy & Power and Minerals Development was the chief guest of the opening ceremony. He said economics and energy are closely related to each other. Pakistan which is always facing the perception of ailing economy must work on energy consumption and reduce its dependency on fossil fuels that was adopted by the developed countries, he added. "Pakistan is a land of pure / clean energy then why not to focus on pure and clean

energy" he remarked. He referred to the COP 28th conference 2023 where the developed world has vowed to lessen its dependency on fossil fuels, adding, why not Pakistani engineers and professionals follow the same path and move towards sustainable development of the country. He urged the experts to focus on renewable energy solutions and devise workable policies since Pakistan especially Khyber Pakhtunkhwa is blessed in renewable energy resource.

The Vice Chancellor, UET Peshawar Prof. Dr. Qaisar Ali said, UET Peshawar through USPCAS is all set to work with government on solarization of public sector buildings. He urged the government to work jointly on this project in future. Prof. Dr. Sahar Noor, Dean, Faculty of Mechanical, Chemical, Industrial Engineering highlighted the importance of investing in renewable energy sources for ensuring benefits in the climate change and sustainable development.

## **International Conference on Innovation in Computing Technologies and Information Sciences (ICTIS-24) held at UET Peshawar**

The two-day International Conference on Innovation in Computing Technologies and Information Sciences (ICTIS-24), organized ORIC and Department of Computer System Engineering in collaboration with the National Center for Big Data and Cloud Computing, was held on April 29th and 30, 2024 at UET Peshawar. The conference was aimed to foster extensive discourse and collaboration among academics, researchers, and professionals on the latest advancements in the realm of Computing Technologies and Information Sciences. Vice Chancellor Prof. Dr. Qaisar Ali, while the Chief Guest of the Clos-



ing Ceremony was Mr. Khalid Latif, Special Assistant to the Chief Minister on Science and Technology, Khyber Pakhtunkhwa. The keynote speakers included Mr. Huzaifa Habib (Community Manager at Google), Dr. Asif Khan (Water & Climate Change expert with ADB & World Bank), Muhammad Zeeshan (Web & App Developer), Engr. Hameed Ullah Jan (CEO Aptech Media Game Development), and Mr. Imran Khan (Digital Transformation Professional). "ICTIS-24 served as a platform for the exchange of ideas, the exploration of new methodologies, and the dissemination of groundbreaking discoveries. During the closing ceremony, Mr. Khalid Latif, Special Assistant to the Chief Minister on Science and Technology in Khyber Pakhtunkhwa, commended UET Peshawar for hosting such an impactful conference and announced undergraduate and postgraduate scholarships for the talented students.

### **National Conference on Biogas Technologies held at USPCASE UET Peshawar**

A one-day national conference on Biogas Technologies, organised by the USPCAS-E UET Peshawar was held on April 25, 2024. The conference was aimed to create awareness on using the biogas plants as a sustainable energy source and foster collaborative efforts among government, private organizations and communities for promotion of adoption of biogas technology in Pakistan.

The Vice Chancellor Prof. Dr. Qaisar Ali while addressing the audience, emphasized over environmental degradation and rapid climate change, urged the researchers for an engaged role in finding sustainable practices

especially in biogas technology to meet the energy demand but also saving natural resources. The speakers included Dr. Abdul Sattar Nizami from Government College University Lahore (GCUL), Mian Arif, CEO Revgreen-Lahore, Engr. Muhammad Saeed, Operations Manager WSSP and Engr. Masood Ahmad, Panache Construction, Mehmood Ahmad, Senior Agricultural Engineer from the Department of Agriculture, Mirpur Azad Kashmir and Muhammad Siddique, CEO of Creco (Pvt) Ltd, who spoke on different aspects of bio gas and its modern applications. The conference also conducted a panel discussion moderated by Dr. Zoahib-ur-Rehman Afridi, which recommended for Government and industry collaboration for promoting the biogas technologies across KP, thereby paving the way for more sustainable energy landscape.



# Research & Development

## CHAPTER 3

## Faculty Research Publications

### Faculty of Civil, Agricultural and Mining Engineering

Name of Department	Impact Factor Journals [JCR only]	Category W	Category X	Category Y	Category Z
Department of Civil Engineering, Peshawar Campus	38	31	7	1	0
Department of Civil Engineering, Jalozai Campus	13	11	6	3	0
Department of Civil Engineering, Bannu Campus	23	23	5	2	0
Department of Agricultural Engineering	5	4	1	2	0
Department of Mining Engineering	19	11	5	5	0
National Institute of Urban Infrastructure Planning	0	4	1	1	0
<b>Total</b>	<b>98</b>	<b>84</b>	<b>25</b>	<b>14</b>	<b>0</b>
<b>Sub Total = 221</b>					

### Faculty of Electrical and Computer Engineering

Name of Department	Impact Factor Journals [JCR only]	Category W	Category X	Category Y	Category Z
Department of Electrical Engineering, Peshawar Campus	21	18	2	1	0
Department of Electrical Engineering, Jalozai Campus	6	0	0	1	0
Department of Electrical Engineering, Bannu Campus	5	4	1	0	0
Department of Computer Systems Engineering	26	26	7	37	0
Department of Software Engineering, Peshawar Campus	5	5	1	2	0
Department of Computer Science, Peshawar Campus	26	26	0	8	0
Department of Computer Science, Jalozai Campus	1	0	0	1	0
<b>Total</b>	<b>90</b>	<b>79</b>	<b>11</b>	<b>50</b>	<b>0</b>
<b>Sub Total = 230</b>					



## Faculty Research Publications

### Faculty of Mechanical, Chemical and Industrial Engineering

Name of Department	Impact Factor Journals [JCR only]	Category W	Category X	Category Y	Category Z
Department of Mechanical Engineering, Peshawar Campus	8	9	8	11	1
Department of Mechanical Engineering, Jalozai Campus	7	1	5	0	0
Department of Mechatronics Engineering	20	8	7	6	0
Department of Chemical Engineering	64	50	2	9	0
Department of Industrial Engineering, Peshawar Campus	24	3	3	0	0
Department of Industrial Engineering, Jalozai Campus	3	2	0	0	0
US Pakistan Center for Advanced Studies in Energy	40	40	0	1	0
<b>Total</b>	<b>166</b>	<b>113</b>	<b>25</b>	<b>27</b>	<b>1</b>
<b>Sub Total = 332</b>					

### Faculty of Architecture, Allied Sciences and Humanities

Name of Department	Impact Factor Journals [JCR only]	Category W	Category X	Category Y	Category Z
Department of Basic Sciences & Islamiat	11	8	3	0	0
Department of Architecture, Abbottabad	0	0	1	11	0
<b>Total</b>	<b>11</b>	<b>8</b>	<b>4</b>	<b>11</b>	<b>0</b>
<b>Sub Total = 34</b>					

**Grand Total = 817**

## M.Sc. Student Research Projects 2023-24

### Department of Civil Engineering, Peshawar

- Engr. Tauseef Ahmad, "Characterization of Non-Linear Behaviour of Asphalt Concrete Using Single Edged Notch Beam", supervised by Prof. Dr. Rawid Khan and Engr. Manzoor Elahi, (co-supervised).
- Engr. Muhammad Asim, "Rejuvenating Aged Asphalt Binder from Reclaimed Asphalt Pavement through the Utilization of Waste Cooking Oil", supervised by Dr. Muhammad Tariq.
- Engr. Jawad Hussain, "The Utilization of Plastic Waste as a Strengthening Component in Solid Road Pavement", supervised by Prof. Dr. Rawid Khan and Engr. Manzoor Elahi, (co-supervised).
- Engr. Alam Gir, "Behavior of RC beam-column joints using high strength concrete and engineered cementitious composites", supervised by Dr. Muhammad Fahim.
- Engr. Haider Ali Hassan, "Assessment of Climate Change Impact on Inflows to Amandara Headwork Using HEC-HMS and ANNs", supervised by Dr. Ateeq-ur-Rauf.
- Engr. Fahad Rashid, "Mechanical Properties Evaluation of Fly Ash Bricks in Masonry Construction", supervised by Prop. Dr. Khan Shahzada.
- Engr. Syed Mehran Yousaf, "Evaluation of Lateral Strength Capacity of Cored Interlocking Blocks Masonry Walls under Variable Precompression Loads", supervised by Dr. Akhtar Gul and Prof. Dr. Khan Shahzada (co-supervised).
- Engr. Muhib Ur Rahman, "Evaluation of Mechanical Properties of Rat-Trap Bond (RTB) Fly Ash Brick Masonry", supervised by Prof. Dr. Khan Shahzada.
- Engr. Hamid Anwar, "Forecasting Stream flow in Swat River Basin using Machine Learning Techniques", supervised by Dr. Afed Ullah Khan.
- Engr. Samiullah, "Effect of vertical load on the pile lateral load distribution in pile raft system", supervised by Dr. Irfan Jamil.
- Engr. Mohammad Ilyas Siddiqi, "Effect of Relative Density on the Lateral Response of Piled Raft Foundation", supervised by Dr. Irfan Jamil.
- Engr. Amjad Ali Khan, "Short term Reservoir Level Forecasting using various Artificial Intelligence Techniques", supervised by Dr. Ateeq Ur Rauf.
- Engr. Inam Ullah, "Enhancing Structural Modeling and Design Efficiency in BIM through the Synergy of Microsoft Excel, Dynamo, Auto desk Revit and Naviswork", supervised by Dr. Muhammad Waseem.
- Engr. Shabir Jan, "The reservoir inflow prediction of Tarbela Dam using AI algorithms", supervised by Dr. Alamgir Khalil.
- Engr. Uzair Khan, "Meteorological drought assessment in Kabul river basin using machine learning techniques", supervised by Dr. Alamgir Khalil.
- Engr. Muhammad Atif Hussain, "Landslide Susceptibility Mapping Using Probabilistic Approach and GIS: A Case Study (Swat KPK Pakistan)", supervised by Dr. Irfan Jameel.
- Engr. Muhammad Ejaz Ahmad, "Calibration of SAP2000 Nonlinear Models for Beam-Column Joints of RC Moment Frame", supervised by Prof. Dr. Qaiser Ali and Dr. Sikandar Sajid (co-supervised).
- Engr. Awais Ali, "Numerical Assessment of Confined and Unreinforced Rat-Trap Bond Brick Masonry", supervised by Dr. Muhammad Fahim.
- Engr. Ajmal Khan, "Retrofitting of Confined Masonry Structure with Fiber Reinforced Polymer (FRP)", supervised by Dr. Qazi Samiullah and Dr. Khan Shahzada, (co-supervised).
- Engr. Bilal Khan, "Flexural Strengthening of Reinforced Concrete Beams using External Steel Elements with Different End Condition", supervised by Dr. Akhtar Gul and Prof. Dr. Khan Shahzada, (co-supervised).
- Engr. Muhammad Zeeshan Ahmad, "Stabilization of fine grained soil with pine needles and marble dust", supervised by Dr. Irfan Jamil.
- Engr. Manahil Tajriyan, "Characterization of Non-Linear Behaviour of Asphalt Concrete in Pakistan: Micro-Mechanical Modeling", supervised by Prop. Dr. Rawid Khan and Engr. Manzoor Elahi (co-supervised).
- Engr. Saif Ur Rehman, "Development of Fragility curves for Rat Trap Bond Masonry Buildings", supervised by Prof. Dr. Mohammad Ashraf.
- Engr. Muhammad Anwar, "Characterization of Embankment material using Sand Tire mix as additive and validating the results obtained from large scale Direct Shear test in Abaqus Software", supervised by Prof. Dr. Rawid Khan.
- Engr. Mohsin Khan, "Comparative analysis of RC Beam-Column Joints Made with Normal and Zeolite-Modified Concrete", supervised by Dr. Qazi Samiullah.
- Engr. Shah Faisal, "Developing Fragility Curves for a high-rise reinforced concrete Building in Pakistan", supervised by Dr. Muhammad Waseem.
- Engr. Ibrar Ul Haq, "Seismic Audit of Buildings in Pakistan (Case Study Dir City)", supervised by Prof. Dr. Khan Shahzada.
- Engr. Muhammad Zaryab Khan, "Irrigation Demand and Supply Analysis under Climate Change and Agricultural Scenarios for Proposed Chashma Right Canal (Lift Cum Gravity), Project", supervised by Dr. Ateeq-ur-Rauf.
- Engr. Amna Khan, "Computational Seismic Analysis of Interlocking Block Masonry using Micro Moedelling Approach", supervised by Dr. Akhtar Gul and Prof. Dr. Khan Shahzada (co-supervised).

- Engr. Zia Ud Din, “Predicting Strength Characteristics of Rice Husk Ash Incorporated Concrete using Genetic Programming-based Algorithm”, supervised by Prof. Dr. Khan Shahzada and Dr. Mudassar Iqbal (co-supervised).
- Engr. Shahzeb, “Impact of Fly Ash (FA) and Marble Dust (MD) on Mechanical, Durability and Micro-structural Characteristics of Concrete”, supervised by Prof. Dr. Rawid Khan.
- Engr. Muhammad Usama, “Comparison between Single-Mode and Multi-Mode Analysis for Simply Supported Bridges”, supervised by Prof. Dr. Muhammad Ashraf.
- Engr. Hamza Ahmad Qureshi, “Investigating the Influence of Area Replacement Ratio on Stone Column Performance: A Numerical Study”, supervised by Dr. Muhammad Waseem.
- Engr. Sahibzada Hamza Jan, “Application of AI Models in Predicting the Resilient Modulus of Subgrade Soil”, supervised by Prof. Dr. Rawid Khan.

### Earthquake Engineering Center

- Engr. Azib Jadoon, “Sensitivity analysis on the input parameters in probabilistic seismic hazard assessment for Peshawar”, supervised by Dr. Shahid Ullah.
- Engr. Wasim Khan, “Seismic Risk Estimation of Residential Building in District Peshawar”, supervised by Dr. Shahid Ullah.
- Engr. Obaid Ullah Mir, “Site Specific Seismic Hazard Analysis for a Realistic Site, Elegance Arena Peshawar (Site Class E)”, supervised by Dr. Shahid Ullah and Prof. Dr. Qaiser Ali (co-supervised).

### Department of Agricultural Engineering

- Engr. Zainab Asad, “Assessing Snow Cover and Catchment Characteristics of Mohmand Dam Using GIS and Remote Sensing Techniques”, supervised by Prof. Dr. M. Shahzad Khan.
- Engr. Anees Hassan, “Evaluating Productivity of Wheat under Different Sowing and Tillage Methods in Silty Loam Soil”, supervised by Prof. Dr. Muhammad Shahzad Khan Khattak.
- Engr. Mujeeb Ullah, “Assessment of soil erosion and its impacts on agriculture using RUSELE model and GIS- A study of Kunar River”, supervised by Dr. Mohammad Ajmal.
- Engr. Sami Ullah, “Assessment of Evapotranspiration Models for Different Climatic Regions of Khyber Pakhtunkhwa Using Artificial Intelligence Optimization Tools”, supervised by Prof. Dr. Zia Ul Haq.

### Department of Mining Engineering

- Engr. Muhammad Irshad, “Geo-polymerization of Marble sludge: a way forward for its Eco-friendly utilization”, supervised by Dr. Salim Raza.

### Department of Mechanical Engineering, Peshawar

- Engr. Ahmad Ali, “Thermo mechanical and Microstructural Response of AISI4135 Steel in Failed Hydraulic Jacks for Grate Coolers: Analysis and Optimization”, supervised by Prof. Dr. Abdul Shakoor.
- Engr. Imran Khan, “Effect of Electromagnetic Treatment on the Mechanical Properties of Turbine Blades”, supervised by Prof. Dr. Afzal Khan and Prof. Dr. Abdul Shakoor (co-supervised).
- Engr. Salman Farooq, “Recycling of PV modules: A Step Towards recovery of reusable materials”, supervised by Prof. Dr. Abdul Shakoor and Dr. Muhammad Noman (co-supervised).
- Engr. Muhammad Tahir, “Surface Coating of UHMWPE to Improve Performance”, supervised by Prof. Dr. Rizwan M. Gul and Dr. Ahmad Nawaz (co-supervised).
- Engr. Fakhru Islam, “Effect of Different Quenching Mediums on Corrosion rate and Hardness of Medium Carbon Steel”, supervised by Prof. Dr. Rizwan Mehmood Gul.
- Engr. Mohammad Iftikhar, “Modeling & Simulation of Active Suspension System of Vehicle in MATLAB”, supervised by Dr. Shaukat Ali Shah.
- Engr. Muhammad Shah, “Design and Development of Single DOF Linear Haptic Simulation Device for Educational Purpose”, supervised by Prof. Dr. Hamid Ullah and Dr. Ahmad Nawaz (co-supervised).
- Engr. Mohsin Hayat, “Comparison of indigenously developed and foreign made Total hip joint system”, supervised by Prof. Dr. Rizwan Mahmood Gul.
- Engr. Faiq Said, “Enhancement of Combustion and Thermal Efficiency of Household Geysers”, supervised by Prof. Dr. Afzal Khan.
- Engr. Yaseen Khan, “Design, Development & Fabrication of Kevlar Backed Micro-Silica Gel Bullet Proof Jacket using 3D Printer”, supervised by Prof. Dr. Hamid Ullah and Dr. Ahmad Nawaz (co-supervised).
- Engr. Osama Rehman, “Optimization of Circular Cross Bore in Thick Wall Pressure Vessel using Response Surface Methodology”, supervised by Dr. M. Ali Kamran.
- Engr. Waqas Ahmad, “Coating on Metallic Orthopedic Implants to Improve Performance”, supervised by Prof. Dr. Rizwan M. Gul and Dr. Kareem Akhtar (co-supervised).

### Department of Mechatronics Engineering

- Engr. Zainub Binit-e-Rauf, “Actuator and Sensor Fault Detection System for an Aircraft using Machine Learning”, supervised by Dr. Anam Abid.
- Engr. Masaud Ahmad, “Procurement for Sustainable Competitive Advantage in Pakistan”, supervised by Dr. Rehman Akhtar.
- Engr. Syed Bacha Hussain Bukhair, “Artificial Intelligence-based Glaucoma Detection Using Fundus Images”, supervised by Dr. Shahzad Anwar.
- Engr. Ahmed Rauf Qureshi, “Machine Vision Based 3D Reconstruction for Customized Rehabilitation Prosthesis”, supervised by Dr. Shahzad Anwar.



- Engr. Sami Ul Haq, "Optimizing Bearing Health in Rotary Machines Through Condition-Based Maintenance", supervised by Dr. Muhammad Akmal.
- Engr. Ziviqar Ahmed, "AI Based Diabetes Prediction Using Diabetic Retinopathy Images", supervised by Dr. Muhammad Akmal.
- Engr. Nasir Khan, "Autonomous Vehicles in Extreme Weather: A Deep Learning Approach for Detection and Navigation", supervised by Dr. Gulbadan Sikandar and Dr. Shahzad Anwar, (co-supervised).
- Engr. Abbas Sarwar, "Crayfish-Inspired Algorithm for Route Cluster Optimization in Intelligent Transportation System (ITS)", supervised by Dr. Shahzad Anwar.
- Engr. Sabghat Ullah, "Efficient Object Sorting in Industrial Environments: PLC and Color Sensing Integration", supervised by Dr. Zubair Ahmad Khan.
- Engr. Zain Abbas, "Harnessing the Power of the Human Immune System: A Framework for Handling Manufacturing Process Disruptions", supervised by Dr. Zubair Ahmad Khan.
- Engr. Kashif Ahmad, "Precision in Agriculture: Testing an Innovative Control System for Strawberry Harvesting Robots", supervised by Dr. Zubair Ahmed Khan.
- Engr. Touseef Ahmad, "Development of thermoelectric energy harvester for temperature monitoring of an engine", supervised by Dr. Syed Farid Ullah Khan.
- Engr. Asif Ali, "Detection of leukemia disease using MATLAB and their types", supervised by Dr. Muhammad Akmal Khan..
- Engr. Jalal Uddin Muhammad, "Computational Fluid Dynamics Analysis of a Dual Seat Cockpit Jet Aircraft Environmental Control System", supervised by Dr. Shahzad Anwar.

### Department of Chemical Engineering

- Engr. Hassan Nawaz, "Simulation of CO<sub>2</sub> Absorption for Biogas application using Aspen Plus", supervised by Dr. Hayat Khan and Dr. Muazzam Arshad (co-supervised).
- Engr. Muhammad Abbas Khan, "Flare gas Recovery by retrofitting of Flare gas system in a gas processing plant", supervised by Dr. S. Naveed-ul-Hassan.
- Engr. Fahad Wazir, "Layered double hydroxide base composite for adsorptive remediation of antibiotics", supervised by Dr. Mansoor Ul Hasan Shah.
- Engr. Imran Khan, "Mineral Identification via Artificial Intelligence (AI) based on XRD pattern and mineral hardness data", supervised by Dr. Naseer Ahmad Khan.
- Engr. Muhammad Aqib, "Energy Analysis of Allium Sativum (Garlic) Using Forced Convection Solar Drying", supervised by Dr. Mansoor Ul Hassan and Dr. Waheed Ur Rehman (co-supervised).
- Engr. Muhammad Talha, "Simulation and Optimization of Hydrogen Production by Naphtha Steam Reforming", supervised by Dr. Mansoor Ul Hassan Shah.
- Engr. Qazi Muhammad Ali, "Oil Drops Generation, Stability and its Applications for Produced Water Treatment", supervised by Dr. Asmat Ullah.
- Engr. Murad Khan, "A computational study of segregation in a multi-component solid

fluidized bed separator", supervised by Dr. Syed Naveed Ul Hassan and Dr. Naseer Ahmed Khan (co-supervised), Department of Chemical Engineering.

- Engr. Danial Ahmad, "Hybrid Co-Combustion of Coal Dust with Biomass and Hydrogen Gas", supervised by Prof. Dr. Mudassar Habib and Dr. Muazzam Arshad (co-supervised), Department of Chemical Engineering.
- Engr. Muhammad Sohaib, "Removal of dye and pharmaceutical waste from wastewater using novel bio-adsorbents", supervised by Dr. Mansoor Ul Hassan Shah and Dr. Muhammad Daud (co-supervised).
- Engr. Khalid Mehmood Barki, "Development of Green formulation for the recycling of used Engine Oil", supervised by Dr. Mansoor Ul Hassan Shah.
- Engr. Maryam Munir, "A Computational Study of Change in the Overall Heat Transfer Coefficient and Pressure Drop Due to Inserts in a Shell and Tube Heat Exchanger", supervised by Dr. Syed Naveed ul Hassan.
- Engr. Waqas Ahmad, "Experimental investigation and comparative analysis of the effect of surfactants for improving the heat transfer coefficient in a pool boiling system", supervised by Dr. Naseer Ahmed Khan and Dr. Syed Naveed Ul Hassan (co-supervised).

### Department of Industrial Engineering, Peshawar

- Engr. Sheharyar Mumtaz, "Integration Analysis of Climate Control and Air Conditioning System of Automobiles", supervised by Engr. Dr. Tufail Habib.
- Engr. Tanveer Alam, "Productivity Improvement by Applying a Lean Management Approach in a Home Appliance Industry", supervised by Dr. Tufail Habib.
- Engr. Zeeshan Ahmad, "Efficient Computation of Correlated Ordinates from Multivariate Probability Distributions", supervised by Dr. Rehman Akhtar and Prof. Dr. Salim Ur Rehman (co-supervised).
- Engr. Aftab Khan, "Utilization of Machine Learning and Statistical Techniques for Demand Forecasting", supervised by Dr. Muhammad Omair.
- Engr. Manzoor Alam, "Optimization of process parameters using plasma cutting process for SS400", supervised by Dr. Tufail Habib and Prof. Dr. Shahid Maqsood (co-supervised).
- Engr. Muhammad Saqib Ali, "Risk Analysis of Potential hazards by FMEA & Boston Rectangular Matrix In FF-Steel mills", supervised by Dr. Rehman Akhtar.
- Engr. Muhammad Akram, "Lean Six Sigma Implementation for Improving Sewing Process in Apparel Industry", supervised by Dr. Rehman Akhtar.
- Engr. Masaud Ahmad, "Procurement for Sustainable Competitive Advantage in Pakistan", supervised by Dr. Rehman Akhtar.
- Engr. Behram Ayub Khan, "Customer satisfaction in BRT Peshawar using failure mode and effect analysis (FMEA)", supervised by Dr. Rehman Akhtar.
- Engr. Muhammad Mashal Khattak, "Risk Analysis of Time and Cost Over-run in BRT Peshawar", supervised by Dr. Rehman Akhtar.

- Engr. Qaiser Raza, “Implementation of Lean Six Sigma in the Textile Spinning Sector”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Muhammad Aamir, “Assessment of sustainability in Residential Buildings in Pakistan”, supervised by Prof. Dr. Sahar Noor and Dr. Waqar Ullah (co-supervised).
- Engr. Syed Raza Shah, “Critical Success Factor: Implementation of Energy Management Systems”, supervised by Dr. Rehman Akhtar.
- Engr. Waseem Akbar, “Analysis and Optimization of Mechanical Properties of OSB Made from Palm Leaves and Fronds”, supervised by Dr. Rehman Akhtar.
- Engr. Ayesha Nasrullah, “Enhancing Healthcare Quality: The Role of Lean Six Sigma, TQM, and Strategic Knowledge Management”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Ismat Ullah, “Monte Carlo Simulation and Sensitivity Analysis of Groundwater Quality and Risk Assessment in Urban Peshawar”, supervised by Dr. Rehman Akhtar.
- Engr. Arbab Khushal Khan, “Sustainable Ecosystem Services and Valuation of Artificial Forest”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Nabeel Haider, “Risk Identification and Mitigation between the Production Department and Warehouse/store”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Amir Ullah, “A conceptual six sigma framework for quality excellence in educational institutions”, supervised by Dr. Rehman Akhtar.
- Engr. Muhammad Attique, “Reliability Assessment of Production Machines at a Local Textile Industry”, supervised by Dr. Imran Ahmad.
- Engr. Muhammad Shariq Amir, “Factors Influencing Customer Satisfaction in Pakistan E-commerce: Challenges and Strategies”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Muhammad Inayat Shah, “Exploring the Latest Wheelchair Technologies and Applicability”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Syed Abdal Ali Shah Bukhari, “Modernizing Warehousing in Pakistan: The Role of Industry 4.0 Technologies”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Haseeb Raza, “Complexities of Directional Surveys in Drilling: A Data-Driven Investigation”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Farhat Ali Shah, “Applying Lean Tools for Sustainable Manufacturing in Garments Industry”, supervised by Dr. Tufail Habib.
- Engr. Saeed Ullah, “Identification and ranking of the factors affecting employee's performance within an organization”, supervised by Dr. Rahman Akhtar.
- Engr. Imran Khan, “Multi-objective optimization of FDM process parameters for the mechanical properties of ASA 3d printed parts”, supervised by Dr. Rehman Akhtar and Dr. Muhammad Abas (co-supervised).
- Engr. Mian Hazrat Shah, “Sustainable Energy Management Using the Internet of things (IoT)”, supervised by Dr. Shahbaz Khan.
- Engr. Arbab Muhammad Hamza Khan, “Export and local market challenges and strategies for jaggery (gur)”, supervised by Dr. Sikandar Bilal Khattak.

- Engr. Muhammad Asad Ullah, “Coal Supply Chain Resilience in Pakistan: Risk Assessment and Mitigation Strategies”, supervised by Dr. Sikandar Bilal Khattak.
- Engr. Asad Ali, “Revolutionizing Dairy Production: A Comprehensive Analysis of Industry 4.0-based optimization Strategies in Yogurt Filling Systems”, supervised by Dr. Razaullah.
- Engr. Muhammad Ashraf, “A Modular System Deploying a Natural Processing Language and Lean Six Sigma (LSS) for Efficient Complaint Resolution System – A Case Study of Pakistan Citizen Portal (PCP)”, supervised by Dr. Shahbaz Khan.
- Engr. Shahzeb, “Impact of Fly Ash (FA) and Marble Dust (MD) on Mechanical, Durability and Micro-structural Characteristics of Concrete”, supervised by Prof. Dr. Rawid Khan.

## Centre for Advanced Studies in Energy (USPCAS-E)

- Engr. Abdul Basit, “Fabrication and Characterization of Perovskite Solar Cell in Ambient Conditions”, supervised by Dr. Adnan Daud Khan.
- Engr. Muhammad Sulaiman, “Assessment of barriers and drivers to energy management system implementation in Hayatabad industrial estate industries”, supervised by Dr. Zohaib Ur Rehman and Engr. Noor Muhammad (co-supervised).
- Engr. Jawad Ahmad Murtaza, “Study of Energy Poverty and Sustainability Nexus of Planned Migration in Upper Chitral”, supervised by Dr. Zohaib Ur Rehman Afridi.
- Engr. Maira Amjad, “Multi-criteria Decision Analysis of Choice Switching Towards Solar Energy”, supervised by Dr. Zohaib Ur Rehman Afridi.
- Engr. Sheraz Nisar, “Performance Analysis of Non-Toxic Tandem Perovskite Solar Cell”, supervised by Dr. Muhammad Noman.
- Engr. Muhammad Shahab Khan, “Assessment of water cooled Screw Type Chiller using Quest and Gabi”, supervised by Dr. Muhammad Hassan.
- Engr. Abaseen Aziz Zakhailwal, “Sustainability Assessment of Schools' Curriculum in Afghanistan”, supervised by Dr. Zohaib Ur Rehman and Engr. Noor Muhammad, (co-supervised).
- Engr. Sikandar Inam, “Recycling of Solar Panels Waste into useful Products”, supervised by Dr. Amir Naveed.
- Engr. Yasir Abbas Khan, “Optimizing Energy Consumption for Smart Homes Using Machine Learning Techniques”, supervised by Engr. Atif Sardar Khan and Dr. Muhammad Aslam (co-supervised).
- Engr. Abrar Ullah, “Design and fabrication of bladeless AeroMINE wind turbine”, supervised by Dr. Adnan Daud Khan.
- Engr. Amir Shehzad Gul, “Tailoring Carbon Electrodes to Achieve Enhanced Conductivity and Semi-Transparency for Perovskite Solar Cell”, supervised by Dr. Muhammad Noman.
- Engr. Saddam Hussain, “Post Inter-Connectivity Reinforcement Analysis of Isolated

Gwadar/Mekran Region with National Grid for Reliable and Optimal Operation”, supervised by Dr. Muhammad Aslam.

- Engr. Bilal Khan, “Energy Modeling and Power Measurement of Mobile Robots”, supervised by Dr. Arif Khatak.
- Engr. Muhammad Yasir Muzammil, “Sustainable and Circular Management of Perovskite PV Cells via Recycling of FTO Coated Glass”, supervised by Dr. Adnan Daud Khan.
- Mr. Tariq, “Utilization of Coal Mine Waste and Charcoal for Sustainable Energy Solutions”, supervised by Dr. Amir Naveed.
- Engr. Azmat Ullah, “Boosting the efficiency and transparency of seim-transparent perovskite solar cells through wide band gap CTL”, supervised by Dr. Muhammad Noman.
- Engr. Muhammad Khurshid Ahmad, “Reduction of Losses in Energy Distribution by Reconfiguration of the Network Using New Optimization Technique”, supervised by Dr. Muhammad Aslam.
- Engr. Khizar Adil, “Hybrid Air Conditioning System: Integrating Liquid Desiccants and Refrigeration for Sustainable Cooling”, supervised by Dr. Muhammad Noman.
- Engr. Muhibullah, “Sustainable Wind Energy Solutions for Khyber Pakhtunkhwa: A Financial and Technical Analysis”, supervised by Dr. Adnan Daud Khan.
- Engr. Ziaullah, “Fabrication and Characterization of Low Temperature Material Based Perovskite Solar Cell”, supervised by Dr. Adnan Daud Khan.
- Engr. Umar Zargham, “Design and Assessment of Building Integrated Photovoltaics”, supervised by Dr. Adnan Daud Khan.
- Engr. Muhammad Ehtisham Khan, “Numerical simulation of cooling for photovoltaic modules using phase change materials”, supervised by Dr. Muhammad Hassan.
- Engr. Shaeer Jan, “Integration of Pumped Storage Power Plant in Load Frequency Control For Grid Ancillary Services”, supervised by Dr. Kaleem Ullah.
- Engr. Syed Ali Mashal, “Harnessing Power from Thermostatically Controlled Loads for Active Power Balancing Services”, supervised by Dr. Kaleem Ullah.
- Engr. Muhammad Haris, “Optimizing Load Frequency control Strategy through the Integration of Electric Vehicles”, supervised by Dr. Kaleem Ullah.

### Department of Electrical Engineering, Peshawar

- Engr. Farhan Khan, “Smart Metering Using AI Based Photo Billing”, supervised by Prof. Dr. Gul Muhammad Khan.
- Engr. Khadija Amir, “Decision Based Ensemble IoT’s Network Attack Detection System”, supervised by Prof. Dr. Syed Waqar Shah.
- Engr. Osman, “AI- Driven Prediction and Priority-Based Load Management for Seasonal Variability in Micro-Hydropower Plants: A Jungle-Inn application case”, supervised by Prof. Dr. Gul Muhammad Khan.

- Engr. Kiramat Saeed, “To assist dermatologist in diagnosis of skin cancer through hybrid machine learning algorithms”, supervised by Prof. Dr. Muhammad Irfan Khattak, and Dr. Atif Jan (co-supervised).
- Engr. Asghar Amir, “Sophisticated Ensemble Deep Learning Approaches for Multi label Retinal Disease Classification in Medical Imaging”, supervised by Dr. Tariqullah Jan.
- Engr. Mian Saad Aziz, “Detection of Incipient fault in transformers from waveform distortion using machine learning/probabilistic approaches”, supervised by Prof. Dr. Amjadullah Khattak and Dr. Abdul Basit (co-supervised).
- Engr. Zakir Ullah, “Development of Decentralized Hybrid Frequency Control Scheme for Mitigation of Blackouts in Power Systems”, supervised by Dr. Muhammad Iftikhar Khan and Dr. Muhammad Aslam (co-supervised).
- Engr. Sanam Ijaz, “Implementation/Impact of Solar Energy System on a Power Grid System”, supervised by Prof. Dr. Amjad Ullah.
- Engr. Ijaz Ahmad, “Investigation and Optimization of Compact Dual-Band Micro-strip Patch Antenna Design for Enhanced 5G Wireless Communication Systems”, supervised by Dr. Muhammad Irfan Khattak.
- Engr. Dawood Khan, “Real Time System for Detection of Ragweed in Agriculture Field Using Computer Vision Technique”, supervised by Prof. Dr. Tariq Ullah Jan.
- Engr. Muhammad Afaq, “Bandwidth enhancement of low profile microstrip patch antenna using non-uniform meta surfaces in sub-6 GHzband”, supervised by Dr. Shahid Bashir.
- Engr. Anila Hanif, “Highly isolated 4-port UWB MIMO antenna for next Generation communication system”, supervised by Dr. Shahid Bashir.
- Engr. Kainat Ijaz, “A Next Generation mm-wave 2-port MIMO antenna array system with wideband characteristics for wireless application”, supervised by Dr. Shahid Bashir.

### Department of Computer Systems Engineering

- Engr. Maaz Alam, “Person Biometric Identification through EEG Signals”, supervised by Dr. Nasru Minallah.
- Engr. Abdul Rauf, “IoT-enabled Traffic Flow Analysis: Improving Urban Mobility with Video-Based Insights”, supervised by Dr. Khurram Shahzad Khtak.
- Engr. Umar Sadique, “Exploring Deep Ensemble Classifiers with Explainable AI in HER2 Scoring: Assisting Pathologists in Breast Cancer (BCa) diagnosis”, supervised by Dr. Muhammad Abeer Irfan and Dr. Shahzad Anwar (co-supervised).
- Engr. Ahmad Mustafa, “Predicting Traffic Congestion and CO2 Emissions Using ML”, supervised by Dr. Khurram S. Khattak.
- Engr. Popal Khan Popalzai, “Phonocardiogram Signal (PCG) Analysis: Developing AI-



- Based Model for Detecting Heart Diseases”, supervised by Dr. Khurram S. Khattak.
- Engr. Muhammad Suliman, “Application and challenges of crowd sensing in Intelligent Transportation System”, supervised by Dr. Khurram S. Khattak.
- Engr. Gulab Shah, “Comparative Analysis of Machine Learning Algorithm KNN, SVM with Deep Learning Convolutional Neural Network”, supervised by Dr. Khurram S. Khattak.
- Engr. Tanzila, “A Cost-Effective and User-Friendly Phishing Simulation Environment”, supervised by Prof. Dr. Sadeeq Jan and Mr. Mohammad (co-supervised).
- Engr. Amjad Ali, “Short Term Solar Irradiance Forecasting in Smart Grid Using Deep Learning Approach”, supervised by Dr. Salman Ahmad.
- Engr. Mohsin Ali Shah, “A Tiny ML-Based System for Gesture Classification from EMG”, supervised by Dr. Arbab Masood Ahmad.

### Department of Computer Science, Peshawar

- Ms. Reshma, “An Intuitive and Adaptive Simulation Environment for Enhancing Web Application Security Testing”, supervised by Prof. Dr. Sadeeq Jan.
- Ms. Shabana Mir, “Zero-shot Learning for Covid-19 Diagnosis Using Chest Radiographs”, supervised by Dr. Iftikhar Ahmad.
- Mr. Imtiaz Khan, “Urdu Language Text summarization using Machine Learning”, supervised by Dr. Imran Khan.
- Mr. Zia Ur Rahman, “Clustering Pakistani Music by Lyrics”, supervised by Dr. Syed Adeel Ali Shah.
- Mr. Haroon Yousaf, “Sentiment Analysis of Urdu Language using Machine Learning Models”, supervised by Dr. Syed Adeel Ali Shah.
- Mr. Kamran Aqeel, “Predicting Gene Type from Exon Sequences using Machine Learning”, supervised by Dr. Wajeeha Khalil.
- Mr. Mansoor Khan, “Rapid Detection of E.coli using AIOT”, supervised by Prof. Dr. Gul Muhammad Khan.

### ICT Islamabad

- Engr. Daud Rehmat, “Spectrum Efficiency (SE) improvement in 5G Network using NOMA”, supervised by Dr. Muhammad Omar Farooq.
- Engr. Kashif Nawaz, “Agile Development Methodology: Impact on Project Cost and Time”, supervised by Dr. Irfan Zafar.
- Engr. Nabeel Mushtaq, “Impact of Perceived Service Quality (PSQ) Elements on Client Satisfaction in Telecommunication Industry with Perceived Corporate Image as Mediator”, supervised by Dr. Muhammad Omar Farooq.
- Engr. Muhammad Haseeb Arif, “Analysing the Impact of Pakistan Economic Corridor on Import and Export in Pakistan and China”, supervised by Dr. Irfan Zafar.
- Engr. Khalid Mahmood, “Using System redundancy to mitigate atmospheric turbulence in FSO communication”, supervised by Dr. Shahzada Alamgir Khan.

- Engr. Talat Noreen, “Using Knowledge Management to Enhance Organizational Performance and Effectiveness”, supervised by Dr. Shahzada Alamgir Khan.
- Engr. Sikander Hayat Sarmad, “Empirical Analysis of PTA’S Regulatory Framework for Ensuring Quality of Service in Mobile Networks in Pakistan”, supervised by Dr. Muhammad Omar Farooq.
- Engr. Syed Muhammad Fayaz, “Mitigating Risks through effective Management for Enhancing Organizational Performance”, supervised by Dr. Shahzada Alamgir Khan.
- Engr. Muhammad Adnan Rafiq, “Handover Optimization Scheme for 5G Heterogeneous Network”, supervised by Dr. Muhammad Omar Farooq.
- Engr. Aqib Shahzad, “Analysis of Telecom Projects using Agile Framework”, supervised by Dr. Muhammad Omar Farooq.
- Engr. Muhammad Waqas Arshad, “Impact of Agile Project Management on IT Projects”, supervised by Dr. Irfan Zafar.
- Engr. Umer Shafie Bhatti, “Performance Enhancement of 5G Networks: Re-modeling Power Domain Scheme Through NOMA-MIMO Technologies Integration”, supervised by Dr. Shahzada Alamgir Khan.
- Engr. Usama Aslam, “Designing Flexible Scheduling Algorithm for 5G”, supervised by Dr. Irfan Zafar.
- Engr. Zeeshan Ali, “Enhancing the Energy Efficiency of Wireless Sensor Networks in IoT”, supervised by Dr. Irfan Zafar.
- Engr. Fazal Ilahi, “Energy Efficient Cooperative Quality of Service (QoS) Aware Routing Protocol for Wireless Body Area Sensor Networks”, supervised by Dr. Muhammad Omar Farooq.

### Department of Basic Sciences & Islamiat

- Mr. Nadeem Khan, “Mathematical Analysis of Neurological Disorder Using Fractional Order Derivative”, supervised by Prof. Dr. Amjad Ali.
- Mr. Asif Nawaz, “Analysis of Double Diffusion Convection Prandtl Nanofluid on a Stretching Surface with Internal Heat Generation”, supervised by Dr. Rehan Ali Shah.
- Ms. Fatima Javed, “Physics-Informed Neural Networks for Numerical Solution of 1D Hyperbolic PDEs”, supervised by Prof. Dr. Siraj Ul Islam.
- Ms. Sabahat Saba, “Physics Informed Neural Networks for Solving Advection and Reaction Diffusion Equations”, supervised by Prof. Dr. Siraj Ul Islam.
- Mr. Mujahid Khan, “Local meshless method for elliptic interface PDEs via RBFs augmented with Pascal polynomials”, supervised by Prof. Dr. Siraj Ul Islam and Dr. Masood Ahmed (co-supervised).
- Mr. Naheed Ali, “Deep Learning Strategies for the Study of Myocardial Infarction through Mathematical Modeling”, supervised by Dr. Noor Badshah and Prof. Dr. Siraj ul Islam (co-supervised).
- Ms. Nahida Akhtar, “Medical Image Segmentation by Bhattacharyya Distance Based on Local Probability Distribution”, supervised by Dr. Noor Badshah.

- Ms. Sundas, “Mathematical Modelling for Image Segmentation via Modified Signed Pressure Force”, supervised by Dr. Noor Badshah.
- Mr. Waqar Younas, “Reproductive-Kernal Based Filon Method for Approximation of Highly Oscillatory Integrals”, supervised by Dr. Sakhi Zaman and Prof. Dr. Siraj ul Islam (co-supervised).
- Mr. Muhammad Noman Khan, “Mixed Convection Stagnation Point Flow of a Hyperbolic Tangent Fluid”, supervised by Dr. Rehan Ali Shah.
- Mr. Salman Khan, “Solution of Bratu Equation Through Physics Informed Neural Networks”, supervised by Prof. Dr. Siraj ul Islam and Dr. Masood Ahmed (co-supervised).
- Mr. Muhammad Karim, “Numerical solution of Elliptic Types fourth-order partial differential equation by Pascal polynomial method”, supervised by Dr. Sakhi Zaman.

- Mr. Anees Ahmad, “Solution of Coupled PDI's of Wound Healing Process by Physics-Informed Neural Networks”, supervised by Prof. Dr. Siraj ul Islam and Dr. Noor Badshah (co-supervised).
- Mr. Aslam Zeb, “Analytical Analysis of Fractional Order Swift-Hohenberg Equations”, supervised by Dr. Noor Badshah.

### Department of Architecture, Abbottabad Campus

- Arch. Naveed Ahmad, “The Impact of Spatial Configuration on Students Learning”, supervised by Ar. Dr. Ubaid Ullah.

## Ph.D. Student Research Projects 2023-24

### Department of Electrical Engineering, Peshawar

- Engr. Yousaf Ali, “Intelligent Framework Design for Quality Control in Industry 4.0”, Supervised by Prof. Dr. Syed Waqar Shah.
- Engr. Zahid Zaman, “High Capacity Long Haul Optical Transmission Network Based on Artificial Intelligence Techniques”, Supervised by Dr. Yousaf Khan.
- Engr. Sikandar Afridi, “Medical Image Segmentation Using Deep Learning”, Supervised by Dr. Muhammad Irfan Khattak and Dr. Atif Jan (co-supervised).
- Engr. Asiya Jehangir, “Marine Integration Performance Analysis of Integrated Sensing, Communication and Localization in Underwater Networks”, Supervised by Dr. S. M Majid Ashraf.
- Engr. Sara Islam, “Micro/Nano Filled Insulation for High Voltage and Frequency Applications”, Supervised by Prof. Dr. Muhammad Naeem Arbab.
- Engr. Hafiz Muhammad Fahad Khalil Peracha, “Audio-Visual Speech Enhancement Using Deep Learning”, Supervised by Dr. Muhammad Irfan Khattak.
- Engr. Muhammad Farooq, “Intelligent Antenna Design: Leveraging Machine Learning for Improved Performance”, Supervised by Dr. Shahid Bashir.
- Engr. Waqar Hussain, “Design and Performance Investigation of Hybrid WDM FSO Based Communication System Under Atmospheric Turbulence”, Supervised by Dr. Yousaf Khan.
- Engr. Muhammad Kashif Khan, “Fault Analysis on Transmission Lines Using Machines Learning”, Supervised by Dr. Muhammad Irfan Khattak and Dr. Atif Jan (co-supervised).

### Department of Mechanical Engineering, Peshawar

- Engr. Fazli Yazdan, “Development of a Techno-Economic Model for Building-Integrated Solar Energy”, supervised by Prof. Dr. Afzal Khan and Dr. Naveed Ahmad (co-supervised).
- Engr. Muhammad Kaleem Ullah Khalil, “Development and Characterization of Modified Ultra-high Molecular Weight Polyethylene for Use in Total Joint Replacement”, supervised by Prof. Dr. Rizwan Mehmood Gul and Dr. M. Ali Kamran (co-supervised).
- Engr. Qazi Muhammad Yaseen, “Welding of Dissimilar Alloys for High Performance Applications”, supervised by Prof. Dr. Rizwan Mehmood Gul and Prof. Dr. Fahd Nawaz Khan (co-supervised).
- Engr. Arshad Ali Khan, “The Effect of Micro-Filler Based Epoxy Coating on the Corrosion Resistance of Aluminum Alloy”, supervised by Prof. Dr. Afzal Khan.
- Engr. Ihsan Ullah Khan, “Air Quality Data Classification, Pattern Recognition and Development of a Predictive Model using Mahalanobis Taguchi System”, supervised by Dr. Feroz Shah.

### Department of Agricultural Engineering

- Engr. Arshad Ali, “Forecasting and Evaluation of Reference Evapotranspiration for Irrigation Water Indenting”, Supervised by Prof. Dr. Zia UlHaq.
- Engr. Shahid Hameed Khan Khalil, “Synergizing the Water-Energy Nexus for Improving Wheat Productivity Using Climate-Smart Agriculture Practices in Pothohar Region-Punjab, Pakistan”, Supervised by Prof. Dr. M. Shahzad Khan.

- Engr. Waheed Ali “Effects of Irrigation Levels and Emitter Density on Water Productivity of Cotton under Semi-Arid Environment”, Supervised by Prof. Dr. Muhammad Shahzad Khan Khattak.

### Department of Civil Engineering, Peshawar

- Engr. Ezaz Ali Khan, “Site Characterization for Khyber Pakhtunkhwa Using Ambient Noise Array Analysis”, Supervised by Prof. Dr. Khan Shahzada and Dr. Shahid Ullah, (co-supervised).

### Department of Computer Systems Engineering

- Engr. Amir Habib, “Security and Privacy of Cyber Physical Systems”, Supervised by Dr. Salman Ahmed.
- Engr. Waseem Ullah Khan, “LLMs Based Architecture for Stance Detection in Social Media Platforms”, Supervised by Dr. Salman Ahmed.
- Engr. Mahmood Ul Haq, “An enhanced face Recognition Algorithm for Identifying Criminal Images”, Supervised by Dr. Muhammad Athar Javed Sethi.
- Engr. Khurshid Ahmad, “Design and implementation of centralize resource router for NoC using FPGA”, Supervised by Dr. Muhammad Athar Javed Sethi.
- Engr. RiazUd Din, “Stock Price Forecasting Using Deep Learning Framework”, Supervised by Dr. Salman Ahmed.

### Department of Computer Science Peshawar

- Engr. Imran Maqsood, “Effective User Interfaces for Illiterate and Semi-Illiterate People of Pakistan”, supervised by Prof. Dr. Sadeeq Jan.
- Ms. Sana Khattak, “An Artificial Intelligence based Framework for the Security Assessment of Digital Banking Services”, supervised by Prof. Dr. Sadeeq Jan.
- Ms. Tahira Khalil, “Violence Scene Prediction and Filtering in Animated Videos”, supervised by Dr. Sadeeq Jan.
- Ms. Durdana Pervez, “Light weight Provenance based Authentication Model (energy consumption reduces) for Underwater Sensor Networks (UWSNs) in Internet of Things (IoT)”, Dr. Zakira Inayat.

### Department of Basic Sciences & Islamiat

- Mr. Hazrat Bilal, “Neural Network for the Numerical treatment of Non-linear Coupled Dynamical Systems”, supervised by Dr. Rehan Ali Shah.
- Mr. Akhtar Jan, “Study of Dynamical Enzymatic Cooperative Chemical Reactions and their Stability”, supervised by Dr. Rehan Ali Shah.
- Mr. Matiullah, “Mathematical Modelling and Numerical Simulation of Joint Image Restoration and Segmentation”, supervised by Dr. Noor Badshah.
- Mr. Shafiullah, “Quotient Regularization Based Models for Signal and Image Processing”, supervised by Dr. Tufail Ahmad Khan and Dr. Noor Badshah (co-supervised).

### US Pakistan Centre for Advanced Studies in Energy, USPCAS-E

- Engr. Muhammad Suleman Malik, “Enhanced Load Forecasting and Transmission Planning in Modern Power System”, supervised by Engr. Dr. Muhammad Iftikhar Khan and Engr. Dr. Abdul Basit (co-supervised).
- Engr. Muhammad Saad Rehan, “Fabrication and Characterization of Flexible Perovskite Solar Photovoltaics for Sustainable Energy Solutions”, supervised by Dr. Adnan Daud Khan.

### Department of Industrial Engineering, Peshawar

- Engr. Abdur Rehman Babar, “Optimizing Value Added Work in Process and Energy Consumption for Manufacturing Cell using Artificial Intelligence Tools”, supervised by Prof. Dr. Iftikhar Hussain.
- Engr. Muhammad Arshad, “Design of an AI integrated Logistic Network for Sustainable Health-Care Waste Management”, supervised by Prof. Dr. Shahid Maqsood.



### Faculty Research Proposals approved for funding 2023-24

S.No.	Name of Agency	Principal Investigator	Thematic Area	Title of Research Proposal	Total Funding Approved (Rs.)
1.	SRGP	Dr. Zeeshan Shafiq NCAI	Engineering & Technology	Low-Cost Muloti-Robot Network for security, cleaning Vacuming and mopping using internet of things (IoT) and Artificial Intelligence (AI) for Hygienic and COVID-19 free indoor Environment	1000000
2.	NCAI	Dr. Gul Muhammad NCAI	Engineering & Technology	National Center for Artificial Intelligence	170790000
3.	NCRA	Prof. Dr. Tahir Khan Mechatronics Engg;	Engineering & Technology	National Center for Robotic and Automation	79800000
4.	NCCS	Dr. Sadeeq Jan & Dr. Salman Ahmad Computer System Engg	Engineering & Technology	National Center for Cyber Security	40670000
5.	NCBC	Dr. Nasru Minallah Computer System Engg	Engineering & Technology	National Center for Big Data and Cloud Computing	78260000
6.	NRPU	Prof. Dr. Yousaf Khan Electrical Engineering	Engineering & Technology	Covid-19 Vaccine Smart Preserving(VSP) Module	4714800
7.	NRPU	Prof. Dr. Siraj Ul Islam Basic Sci. & Islamiate	Mathematical Sciences	A Computational Meshless Procedure For Interface Problems	829637
8.	NRPU	Prof. Dr. Saeed Gul Chemical Engineering	Engineering & Technology	Synthesis and characterization of low cost hydrophobic geopolymer membrane for water desalination	9450000
9.	NRPU	Prof. Dr. Rizwan Gul Mechanical Engineering	Engineering & Technology	Development and Characterization of Modified Ultra-high Molecular Weight Polyethylene for Use in Total Joint Replacement	11642400

S.No.	Name of Agency	Principal Investigator	Thematic Area	Title of Research Proposal	Total Funding Approved (Rs.)
10.	NRPU	Dr. Qazi Samiullah Civil Engineering	Engineering & Technology	Seismic Evaluation and Retrofitting Confined Brick Masonry Buildings with FRP	6311038
11.	NRPU	Dr. Nasru Minallah Computer System Engg	Engineering & Technology	Crop Evapotranspiration and Statistics Estimation and Deep Learning based Cropland field Parcels Detection using Remote Sensing	12067200
12.	NRPU	Prof. Dr. M. Ashraf, Civil Engineering	Engineering & Technology	Seismic and thermal performance evaluation of energy efficient rate-trap bond masonry buildings	8443200
13.	NRPU	Prof. Dr. Khan Shahzada Civil Engineering	Engineering & Technology	Seismic Capacity Assessment of Textile Fiber Reinforced Infill Walls in Reinforced Concrete Structures: A Step Towards Affordable Housing	6103500
14.	NRPU	Prof. Dr. Irshad Ahmad Civil Engineering	Engineering & Technology	Development of Ground Motion Prediction Equation for Pakistan	3366797
15.	NRPU	Dr. Iftikhar Ahmad Computer Science	Engineering & Technology	Design and Development of Fake News Detection Framework for Urdu Language	5161200
16.	NRPU	Dr. Awais Ahmad Civil Engineering	Engineering & Technology	Numerical modeling of damage in fiber reinforced composites	1919051
17.	NRPU	Dr. Asmat Ullah Chemical Engineering	Engineering & Technology	Produced Water Treatment using Artificial Intelligence based Renewable Energy Powered Membrane Technology: A Novel Approach	8832000
18.	NRPU	Dr. Adnan Daud USPCAS-E	Engineering & Technology	Third generation photovoltaics for building integration: A smart and sustainable energy solution	17211813
19.	NRPU	Dr. Abdul Basit USPCAS-E	Engineering & Technology	Substation power transformer risk management: Data Driven Predictive Maintenance	6780000

S.No.	Name of Agency	Principal Investigator	Thematic Area	Title of Research Proposal	Total Funding Approved (Rs.)
20.	NRPU	Dr. Sajjad Wali Khan Civil Engineering	Engineering & Technology	Performance of External Beam-column joint of Engineered cementitious composite under seismic type loading	5623967
21.	NRPU	Dr. Arbab Masood Ahmad Computer System Engg	Engineering & Technology	Design and development of orthotic device for augmenting weakened neuro-muscular activity in upper and lower limbs of hemiplegic and paraplegics	7788000
22.	NRPU	Prof. Dr. M. Ashraf Civil Engineering	Engineering & Technology	Seismic and thermal performance evaluation of energy efficient rate-trap bond masonry buildings	8443200
23.	NGIRI	Dr. Amjad Ullah Khattak Electrical Engineering	Engineering & Technology	Real Time Car Accident Detection and Alert System	46071
24.	NGIRI	Engr. M. Kahif Khan, Electrical Engineering	Engineering & Technology	Smart Home Automation Integrated with Solar System for Efficient Use of Energy	54254
25.	NGIRI	Engr. Kifayat Ullah Electrical Engineering	Engineering & Technology	Load Management System for Peak Hours	53612
26.	NGIRI	Engr. Qazi M. Yaseen Mechanical Engineering	Engineering & Technology	Additive Investigation of Fused Deposition Modelling Produced Water Vortex Turbine	77981
27.	NGIRI	Prof. Dr. M. Tahir Mechatronics Engineering	Engineering & Technology	Design and Automation of Lawn Mowing Mobile Robot	66913
28.	NGIRI	Prof. Dr. Sahar Noor Industrial Engineering	Engineering & Technology	Design and Fabrication of 3D Scanner using Photogrammetry Techniques	38136
29.	NGIRI	Dr. Bilal Habib Computer System Engg;	Engineering & Technology	Detection of Impurities in Milk using IoT and Embedded System	69563



S.No.	Name of Agency	Principal Investigator	Thematic Area	Title of Research Proposal	Total Funding Approved (Rs.)
30.	NGIRI	Prof. Dr. Farid Ullah Mechatronics Engg;	Engineering & Technology	Design and Development of Canal Cleaning System	77981
31.	NGIRI	Dr. Gul Muhammad Khan Electrical Engineering	Engineering & Technology	Fresh and Rotten Fruit Classification Track Using Deep Learning	51851
32	NGIRI	Dr. Gulbadan Sikandar Mechatronics Engg;	Engineering & Technology	Design and Development of Smart Robo Carrier	36536
33.	NGIRI	Prof. Dr. Farid Ullah Mechatronics Engg;	Engineering & Technology	Design and Fabrication of Adjustable Lower Limb Exoskeleton.	75057
34.	NGIRI	Mr. Yasir Saleem Afridi Computer System Engg	Engineering & Technology	Augmented Reality Based Virtual Try Room	77671
35.	NGIRI	Engr. Shabbir Hussain Science & Technology Jalozai	Engineering & Technology	Experimental Evaluation of Marble Dust for the Improvement of Geotechnical Properties of Engineering Granular Soil	61145
36.	NGIRI	Engr. Saqib Khan Industrial Engineering	Engineering & Technology	Micro Hydroelectric Power Generator	48384
37.	NGIRI	Engr. Saqib Khan Mechanical Engineering Jalozai Campus	Engineering & Technology	Solar Dehydrator for Food Preservation	69681
38.	NGIRI	Dr. Zaka Ullah, Electrical Engineering Jalozai Campus	Engineering & Technology	An Artificial Intelligence Based Control of Electric Bike Traction System to maximize the Driving Range	63653
39	NGIRI	Engr. Najvia Electrical Engineering Jalozai Campus	Engineering & Technology	Design and Implementation of an Affordable Battery Management System (BMS) for Electric Vehicles.	39496

S.No.	Name of Agency	Principal Investigator	Thematic Area	Title of Research Proposal	Total Funding Approved (Rs.)
40.	NGIRI	Dr. Abid Iqbal Electrical Engineering Jalozai Campus	Engineering & Technology	Wheat Plant Diseases Identification through Vision Transformer	77981
41.	NGIRI	Dr. Waqas Ahmad Imtiaz Electrical Engineering Jalozai Campus	Engineering & Technology	Flood Monitoring System through Open CV	72399
42.	NGIRI	Engr. M. Waseem Electrical Engineering Jalozai Campus	Engineering & Technology	A Multi-Criteria Decision Analysis Approach to Traffic Optimization and Level of Services	77981
43.	NGIRI	Dr. Amjad Ali Electrical Engineering Jalozai	Engineering & Technology	IOT Based Smart Masjid	43693
44.	NGIRI	Dr. Faseeh Ahmad Engineering & Sciences Jalozai Campus	Engineering & Technology	Effect of Variable Strength infill Walls on Seismic Performance of an RCC Structure	75766
45.	NGIRI	Dr. Abid Iqbal Electrical Engineering Jalozai Campus	Engineering & Technology	A Wearable Low-cost Muscle Activated Switch for Wireless Control of home appliances	68234
46.	NGIRI	Dr. Tufail Habib Mechanical Engineering Jalozai Campus	Engineering & Technology	Design Analysis and Manufacturing of Dynamic hand splint by applying 3D Printing	72332
47.	NGIRI	Engr. Fakhru Islam Mechanical Engineering Jalozai Campus	Engineering & Technology	Design and Fabrication of Bladeless Turbine	63258
48.	NGIRI	Dr. M. Naeem Khan Electrical Engineering Bannu Campus	Engineering & Technology	IOT Based Healthcare Monitoring System	35889
49.	NGIRI	Dr. Shafaat Ullah Electrical Engineering Bannu Campus	Engineering & Technology	Nonlinear Sliding Mode Base Maximum Power point Tracking Control of a Standalone Photovoltaic System	70006

S.No.	Name of Agency	Principal Investigator	Thematic Area	Title of Research Proposal	Total Funding Approved (Rs.)
50.	NGIRI	Engr. Fawad Ahmad Electrical Engineering Bannu Campus	Engineering & Technology	An Intelligent Traffic Control System Using Image Processing	66461
51.	NGIRI	Engr. Muhammad Riaz Electrical Engineering Bannu Campus	Engineering & Technology	Design & Implementation of Solar Tracking System Using Arduino	54197
52.	NGIRI	Engr. Muhammad Ayaz Electronics Engineering Abbottabad Campus	Engineering & Technology	Environment Health Monitoring System for Metropolitan cities through Quadcopter	57724
53.	NGIRI	Engr. Mahmoona Gul Electronics Engineering Abbottabad Campus	Engineering & Technology	IC Designing of Encrypted Data Co processor Using Partial Encryption	76209
54.	NGIRI	Dr. Anees Ullah Electronics Engineering Abbottabad Campus	Engineering & Technology	System on chip design using rocket chip SoC generation	76209
55.	NGIRI	Engr. Yasir Malik Electronics Engineering Abbottabad Campus	Engineering & Technology	Local Car Number plate recognition using deep leaning	60258



# Innovation & Commercialization

## CHAPTER 4

## Office of Research, Innovation and Commercialization (ORIC)

ORIC, UET Peshawar is focused on transforming pure knowledge into products and services for community welfare. Its main role is to strengthen University's research and knowledge creation process by providing strategic and operational support through promoting entrepreneurship, technology-transfer and commercialization activities to energize local and national economy.

It also aims at strengthening University-Industry relationships by enhancing cross-cutting and multi-disciplinary research initiatives for the up-gradation of local and national industries. In general it aspires to achieve sustainable development by translation of research into public benefit through ensuring research relevance in terms of social, economic and environmental aspects.

### Self Evaluation Scores 2023-24

S.No.	Key Performance Indicator	Score Assigned	Score Obtained
1.	Human Resource and Operations	10	9.5
2.	Research Support & Management	45	28.5
3.	Capacity Building	30	16
4.	Commercialization of Research	15	11.5
<b>Total</b>		<b>100</b>	<b>65.5</b>

### Consultancy contracts executed through ORIC with Industry, Commerce & Government 2023-24

S.No.	Title of Project	Name of PI with Department	Company	Contract Value (Rs.)	Project Timeines (Start and End)
1.	Structure Assessment of Time Center Saddar Bazar Peshawar Cantt	Department of Civil Engineering, UET Peshawar	Time Center Saddar Bazar Peshawar Cantt, Pakistan	1381300	05-Mar-2024 04-Mar-2025
2.	Feasibility Study, Design and Construction of District Administration block at District Hangu Lower Chitral	Dean Faculty of CAM, Professor, Civil Engineering	C&W Hangu Lower Chitral	600000	24-Aug-2023 23-Aug-2024
3.	Structure Stability Report in Respect of GHS Amanavi District Shangla and GPS Dughlai Swat Under KP Reconstruction	Department of Civil Engineering, UET Peshawar	GHS Amanavi Distric Shangla	813545	22-Apr-2024 21-Apr-2025
4.	Visit of UET Team to the Building Barrack no.2 Elite Police Training Center	Department of Civil Engineering, UET Peshawar	Elite Police Training Center Hakim Abad, Pakistan	60000	22-Apr-2024 21-Apr-2025
5.	Core Test at Cantt Icon (Mall and Residency)	Department of Civil Engineering, UET Peshawar	C&W Peshawar	66700	02-Apr-2024 01-Apr-2025
6.	Structure Stability Report in Respect of GHS Amanavi District Shangal and GPS Dughlai Swat Under KP Reconstruction	Department of Civil Engineering, UET Peshawar	GHS Amanavi Distric Shangla	70000	02-Apr-2024 01-Apr-2025
7.	Solar PV System Installed at Kohat Board	Director USPCAS-E UET Peshawar, Director, USPCAS-E	Kohat Board, Pakistan	748469	27-Mar-2024 26-Mar-2025

S.No.	Title of Project	Name of PI with Department	Company	Contract Value (Rs.)	Project Timeines (Start and End)
8.	Construction of New Office Building in Gadoon Textile Mill	Department of Civil Engineering, UET Peshawar	Gadoon Textile Mill, Swabi, Pakistan	139600	05-Mar-2024 04-Mar-2025
9.	Revision of Design of Retaining Wall at District Jail Swat	Department of Civil Engineering, UET Peshawar	District Jail Swat, Pakistan	500000	20-Feb-2024 19-Feb-2025
10.	Inspection of Zard Building Police Training Center	Department of Civil Engineering, UET Peshawar	Police Training Center Hangu, Pakistan	850000	11-Jan-2024 10-Jan-2025
11.	Geotechnical and Structural Evaluation of Police Training Center at Hakeem Abad Nowshera	Department of Civil Engineering, UET Peshawar	Police Training Center Nowshera, Pakistan	60000	22-Jan-2024 21-Jan-2025
12.	Site visit to Battagram for testing of Chairlifts	Department of Civil Engineering, UET Peshawar	Battagram Chair lifts	60000	02-Jan-2024 01-Jan-2025
13.	Retaining of Under Construction wall Donga Gali	Department of Civil Engineering, UET Peshawar	C&W Marre	50000	03-Nov-2023 02-Nov-2024
14	Master Planning and Designing of KP S&T Museum	Dean Faculty of CAM, Professor, Civil Engineering	KP S&T Museum Mardan, Pakistan	9223550	10-Jan-2024 09-Jan-2025



S.No.	Title of Project	Name of PI with Department	Company	Contract Value (Rs.)	Project Timeines (Start and End)
15	Structural Design vetting of Multi-purpose commercial and residential flats at warsak-1	Director Earthquake Engineering Center, Professor, Civil Engineering	Warsak-1, Pakistan	1000000	18-Dec-2023 17-Dec-2024
16.	Retaining of Under Construction Wall Donga Gali	Department of Civil Engineering, UET Peshawar	C&W Marre	50000	20-Oct-2023 19-Oct-2024
17.	NATCAT SUPARCO	Dean Faculty of CAM, Professor, Civil Engineering	SUPARCO, Pakistan	1800000	31-Aug-2023 30-Aug-2024
18.	Site Visit to Ghanool Paprang Road (09 KM) District Mansehra	Department of Civil Engineering, UET Peshawar	C&W Manshera	35000	05-Oct-2023 04-Oct-2024
19.	Pile/Foundation Capacity Curve for 150m Bridge on Bara River Sheikh Muhammadi Peshawar	Department of Civil Engineering, UET Peshawar	C&W Peshawar	150000	22-Sep-2023 21-Sep-2024
20.	Structural Design of Judicial Complex	Department of Civil Engineering, UET Peshawar	Judicial Complex Wari Upper Dlr, Pakistan	600000	22-Sep-2023 21-Sep-2024
21.	Destructive Testing of Columns at 500 KV Grid Station NTDC, Peshawar	Department of Civil Engineering, UET Peshawar	NTDC Grid Station, Pakistan	139350	28-Sep-2023 27-Sep-2024

S.No.	Title of Project	Name of PI with Department	Company	Contract Value (Rs.)	Project Timeines (Start and End)
22.	Construction of Rooms in Girls Hostel of KMC	Department of Civil Engineering, UET Peshawar	KMC Girls Hostel Peshawar, Pakistan	529740	14-Sep-2023 13-Sep-2024
23.	Improvement of Existing Jails in Khyber Pakhtunkhwa	Dean Faculty of CAM, Professor, Civil Engineering	District Jail Mansehra, Pakistan	400000	11-Sep-2023 10-Sep-2024
24.	Master Planning and Designing of KP S&T Museum	Dean Faculty of CAM, Professor, Civil Engineering	KP S&T Museum Mardan, Pakistan	8616750	12-Sep-2023 11-Sep-2024
25.	Pile/Foundation Capacity Curve for 150m Bridge on Bara River, Sheikh Muhammadi Peshawar	Department of Civil Engineering, UET Peshawar	Sub Divisional Officer-II, C&W Highway Sub Division-II Peshawar., Pakistan	150000	20-Sep-2023 19-Sep-2024
26.	Structure Design of Judicial Complex Wari, Dir Upper	Department of Civil Engineering, UET Peshawar	Judicial Complex Wari Upper Dir, Pakistan	600000	20-Sep-2023 19-Sep-2024
27.	Improvement of Existing Jails in Khyber Pakhtunkhwa	Dean Faculty of CAM, Professor, Civil Engineering	District Jail Mansehra, Pakistan	400000	04-Sep-2023 03-Sep-2024
28.	Construction of BS Blocks, Additional Classrooms / Missing Facilities / Security Facilities in Government Colleges in KP	Dean Faculty of CAM, Professor, Civil Engineering	Government Girls Degree College Chitti Dheri Mansehra, Pakistan	500000	28-Aug-2023 27-Aug-2024

S.No.	Title of Project	Name of PI with Department	Company	Contract Value (Rs.)	Project Timeines (Start and End)
29.	Feasibility Study, Design and Construction of District Administration Blocks at District Hangu, Lower Chitral	Dean Faculty of CAM, Professor, Civil Engineering	Administration Block Hangu, Mansehra, Balakot, Pakistan	600000	24-Aug-2023 23-Aug-2024
30.	Construction of BS Blocks, Additional Classrooms / Missing Facilities/ Security Facilities in Government Colleges in Khyber Pakhtunkhwa	Dean Faculty of CAM, Professor, Civil Engineering	Government Girls Degree College Chitti Dheri Mansehra, Pakistan	500000	05-Sep-2023 04-Sep-2024
31.	No Damage Assessment of Warsak Dam Crest	Department of Civil Engineering, UET Peshawar	Warsak Dam, Pakistan	2260000	21-Aug-2023 20-Aug-2024
32.	Construction of New Building in Gadoon Textile Mill Swabi	Department of Civil Engineering, UET Peshawar	Gadoon Textile Mill, Pakistan	448050	17-Jul-2023 16-Jul-2024
33.	Core Extraction from PRe-Stressed Girders at Jamrud Bypass from Girders	Department of Civil Engineering, UET Peshawar	C&W Peshawar	117250	07-Jul-2023 07-Jul-2024
34.	Upgradation of 100 High Schools to Higher Secondary Level (B&G) SH: GHS Attarsheesha	Dean Faculty of CAM, Professor, Civil Engineering	GHS Attaresheesha, Pakistan	200000	04-Jul-2023 03-Jul-2024
35.	Procurement Services for Integration of Management Information System for effective public Investment Management (PIM)	Dean Faculty of CAM, Professor, Civil Engineering	Public Investment Management (PIM), Pakistan	581560	04-Jul-2023 03-Jul-2024

## Trainings / Workshops / Seminars / Conferences Arranged on Research, Innovation, & Commercialization Ecosystem etc. for ORIC Personnel

S.No.	Title of Training	National / International	Date of Event
1.	Energy Saving Opportunities through Energy Audits	National	04/30/2024
2.	Use of GIS in Water Resource Engineering: Pitfalls of Auto-Delineation	National	04/29/2024
3.	Prevention of Fraud and other Corrupt Practices	National	02/07/2024
4.	ASME EFX UET Peshawar	National	02/24/2024
5.	IFAK Life Saver	National	11/29/2023
6.	Safe and Secure Approaches in Field Environments (SSAFE)	National	11/30/2023



# Quality Assurance

## CHAPTER 5

## Quality Enhancement Cell (QEC)

The vision of the Quality Enhancement Cell (QEC) is to improve the quality of all aspects of the university's functioning in support of the university's vision to be among the top ranking universities of the world through Education, Research and Innovation. In this regard, QEC is working closely with all stakeholders (internal and external) for the fulfillment of its stated vision. QEC facilitates the implementation of the standard guidelines set by the Higher Education Commission (HEC) as well as the guidelines issued by the accreditation councils from time to time. QEC is responsible for managing the affiliation matters of colleges affiliated with UET Peshawar. QEC plays a leading role in ensuring the implementation of quality standards in the university. Some of the functionalities of QEC include coordinating online surveys as per the 10 proformas of HEC for students, teachers, alumni, employers, and staff at the end of each semester, collecting the required data for quality assessment, and supporting the teaching departments in meeting the requirements of accreditation councils. QEC also ensures the implementation of anti-plagiarism policies, manages the publications verification system, organizes seminars/workshops on quality enhancement, and oversees the Digital Learning & Skills Enrichment Initiative (DLSEI) of HEC.

The University established the Quality Enhancement Cell (QEC) in 2007 as per the requirement of the Higher Education Commission (HEC). The following staff is working in QEC office:

1. Director
2. Additional Director
3. One Deputy Director
4. Three Office Assistants
5. Two Naib Qasids

Additionally, two Program Team Members (PTM) from each academic program also work as sub offices of QEC in each Academic Department.

QEC works closely with teaching departments and faculty members to ensure that curricula are in accordance with HEC curriculum framework. QEC coordinates online evaluation of faculty members and courses by students at the end of every semester. QEC also works with departments and faculty

members on the use of all 10 proformas that HEC has developed to improve the quality of Teaching, Learning and Research. In addition, QEC works on elimination of plagiarism through the use of Turnitin Software provided by the HEC. QEC has given Turnitin accounts to faculty members who have requested these accounts. QEC also assists teaching departments and faculty members in matter related to accreditation of programs through review of accreditation forms before submission to accreditation bodies and mock accreditation visits for the training at faculty members and staff.

## Impact of Quality Assurance

1. QEC implements stringent policies at MS and PhD level to guard against plagiarism. All MSc and PhD thesis are checked by QEC for plagiarism. The degree can only be awarded to a student after QEC certifies that the thesis is not plagiarized. All papers that are submitted for publication in the University journal are also checked by QEC before they are sent to reviewers for review.
2. The student learning is assessed through HEC standardized feedback proformas, which includes Proforma 1 - "Student Course Evaluation Questionnaire", Proforma 2 - "Faculty Course Review Report", Proforma 3 - "Survey of Graduating Students" Proforma 4 - "Research Student Progress Review Form" and Proforma 10 - "Teacher Evaluation Form". The evaluation process helps in strengthening the undergraduate and postgraduate programs.
3. QEC implements self-assessment process of HEC at program level. Program Teams and Assessment Teams have been constituted for all academic programs. The Program Team prepares Self-Assessment Report (SAR) and Assessment Team review the program in light of Self-Assessment Reports and prepare Assessment Team Reports (ATR) and Rubric Form. The SARs provides the department an opportunity to understand where the program stands in term of its mission, objectives, curriculum as well as the status of laboratories, curriculum and students satisfaction etc.
4. QEC organizes seminars/ meetings and workshops on different topics to create awareness among faculty members, staff and students.

5. QEC ensures implementation of all quality assurance criteria and standard guidelines that are received from various statutory bodies. The policies include:
  - i. Plagiarism Policy
  - ii. MSc/MS and PhD Criteria
  - iii. Tenure Track System
  - iv. Semester Guidelines
  - v. SOPs for Teachers, Batch Advisor, Chairman, Semester Coordinator, CMS operator etc.

### Internal Audit

The QEC acts as a focal point that holds the responsibility to ensure the implementation of standard procedures of HEC. It works with Quality Assurance Agency (QAA) of HEC in the process of capacity building of academia, awareness workshop, training of teachers for preparing SARs of the various teaching programs. Students, teachers and employees and other stakeholders' interest have been addressed through HEC standards surveys and feedback to monitor the academic quality. It is measured quantitatively on annual basis by means of a Score Card. In addition, Institutional Quality Assurance (IQA) holds periodic progressive review meetings and performs monitoring visits.

### External Audit

External evaluation is carried through institutional level evaluation and program level accreditation. Institutional Level Evaluation includes Institutional Performance Evaluation (IPE), Campus Reviews, and MS/M.Phil. /PhD. Program Review.

### Review of Institutional Performance Evaluation (RIPE)

QEC coordinates between HEC and UET Peshawar for evaluation. Evaluation is carried out in light of the Review of Institutional Performance Evaluation (RIPE) on the defined RIPE standards. The institutional review process consists of university Portfolio Report (UPR) and a team visit which look at the university critically. The UPR needs to be prepared before the visit of the IPE review panel. The eleven standards of IPE are given below:

- Standard: Mission and Goals
- Standard: Planning and Evaluation
- Standard: Organization and Governance
- Standard: Integrity
- Standard: Faculty
- Standard: Students
- Standard: Institutional Resources
- Standard: Academic Programs and Curricula
- Standard: Public Disclosure and Transparency
- Standard: Assessment & Quality Assurance
- Standard: Student Support Services

### The following reviews and activities have been carried out in 2023-24:

1. MS/MPhil/PhD Review visit conducted in June 2023 and June 2024.
2. Statistical Data submitted to Pakistan Bureau of Statistic in December, 2024.
3. HEC Higher Education Statistical Data submitted in December 2023 and December 2024.
4. HEC Statistical Data (Affiliated Colleges) submitted in December 2023 and December 2024.
5. Teacher and Course Evaluation (Undergraduate & Postgraduate Program) is conducted throughout the year.
6. Higher Education Department (HED) KP Task Force Data provided for allocation of recurring grants in Budget in April 2024.

## Membership of Associations/Networks

1.	International Network for Quality Assurance Agencies in Higher Education (INQAAHE)
2.	Pakistan Network of Quality Assurance in Higher Education (PNQAHE)

- Director QEC is a member of the following statutory bodies of UET Peshawar
  - Senate
  - Syndicate
  - Academic Council
  - Board of Advanced Studies and Research (BOASAR)
  - Grievance Redressal Committee (GRC)
- Outcome Based Education Committee
- Deans Meeting
- Affiliation Committee
- All Boards of Faculties
- UG Policy Review Committee
- PG Policy Review Committee

## Accreditation of Programs from Relevant Councils

Accreditation / Re-accreditation of all undergraduate programs are regularly processed through QEC. The following bodies carry out the evaluation of the academic programs of UET Peshawar:

- Pakistan Engineering Council (PEC)
- Pakistan Council of Architects and Town Planners (PCATP)
- The National Computing Education Accreditation Council (NCEAC)

The following programs are accredited by the relevant accreditation council:

- B.Sc. Industrial Engineering, Peshawar (PEC)
- BSc Computer System Engineering, Peshawar (PEC)
- B.Sc. Chemical Engineering, Peshawar (PEC)
- B.Sc. Agricultural Engineering, Peshawar (PEC)
- B.Sc. Electrical Engineering, Peshawar (PEC)
- B.Sc. Mining Engineering, Peshawar (PEC)

- B.Sc. Mechanical Engineering, Peshawar (PEC)
- B.Sc. Civil Engineering, Peshawar (PEC)
- B.Sc. Mechatronics Engineering, Peshawar (PEC)
- B.Sc. Electrical Engineering, Kohat Campus (PEC)
- B.Sc. Electrical Engineering, Bannu Campus (PEC)
- B.Sc. Civil Engineering, Bannu Campus (PEC)
- B.Sc. Electronics Engineering, Abbottabad Campus (PEC)
- Bachelor of Architecture, Abbottabad Campus (PCATP)
- B.Sc. Industrial Engineering, Jalozi Campus (PEC)
- B.Sc. Mechanical Engineering, Jalozi Campus (PEC)
- B.Sc. Electrical Engineering, Jalozi Campus (PEC)
- B.Sc. Civil Engineering, Jalozi Campus (PEC)
- B.Sc. Energy Engineering (PEC)
- B.Sc. Software Engineering (PEC)
- BS Computer Science, Peshawar (NCEAC)
- BS Data Science, Peshawar (NCEAC)

## Workshops / Seminars

The QEC has conducted the following workshops/seminars/training during 2023-24:

S.No	Event	Date	Organized by	Theme
1.	Training Workshop on Quality of Education	20-22nd Sept. 2023	Director QEC, Dean MCIE	Improving Quality of Teaching in Engineering Education
2.	Training on HEC Undergraduate Education Policy 2023	28th Feb. 2024	Director QEC, Director Undergraduate Studies	HEC Undergraduate Education Policy 2023
3.	Postgraduate Program Review (PGPR) 2023-24	27th June 2024	Director QEC, Director Postgraduate Studies	Post Graduate Program Review
4.	Program Team Members (PTM) Meeting on OBE	16th Oct. 2024	Director QEC	PTM Meeting



# University Professional Ranking

## CHAPTER 6



## TIMES HIGHER EDUCATION (THE) IMPACT RANKING 2023 & 2024

According to the Times Higher Education (THE) Impact Ranking for 2023 & 2024 ,UET Peshawar is ranked as follows:

### TIMES IMPACT RANKING 2023



**Engineering  
Universities (KP)**



**801 - 1000**

Engineering & Technology  
World Ranking



**Engineering  
Universities (Pak)**



**All Universities  
(KP)**

**501-600**

Computer Science World Ranking

### TIMES IMPACT RANKING 2024

**1<sup>st</sup>**

**Engineering  
Universities (KP)**



**801 - 1000**

Engineering & Technology  
and Computer Science  
(Worldwide)

**5<sup>th</sup>**

**Engineering  
Universities (Pak)**

**2<sup>nd</sup>**

**All Universities  
(KP)**



World University  
Rankings 2024  
Asia

**301 - 350**

# Faculty Development

## CHAPTER 7

## Foreign Faculty Development Program

UET's Human Resource Development program, started in 2004, is aimed to meet the growing need for professionals in state-of-the-art engineering disciplines. The following table shows the names of scholars pursuing their Ph.D degree in world's renowned universities.

S.No.	Scholar's Name	Department	Status	University
1.	Mubashir Hayat	Industrial Engineering	Course work in progress	Brandenburg University of Technology, Germany
2.	Wasi Ullah	Electrical Engineering	Course work in progress	University of Edinburgh, UK
3.	Unsia Habib1	Chemical Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
4.	Sajid Khan	Petroleum & Gas Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
5.	Mustafa Kamal	Chemical Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
6.	Farhad Ali	Petroleum & Gas Engineering	Course work in progress	University of Alberta, Canada
7.	Wajid Ali	Petroleum & Gas Engineering	Course work in progress	University of Alberta, Canada
8.	Shakir Azim	Industrial Engineering	Course work in progress	Ghent University, Belgium
9.	Muhammad Qasim	Industrial Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
10.	Hassan Khan	Civil Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
11.	Azmat Ali Shah	Telecommunication Engineering	Course work in progress	Swinburne University of Technology, Australia



## Ph.D. Defenses

### Engr. Altaf Hussain and Engr. Fareed Ahmed successfully defend Ph.D thesis

Engr. Altaf Hussain and Engr. Fareed Ahmed, Department of Industrial Engineering, successfully defended their Ph.D thesis on August 02, 2023 in the video conference, UET Peshawar. Prof. Dr. Iftikhar Hussain, former Vice Chancellor, UET Peshawar was the Ph.D supervisor of Engr. Altaf while the supervisor of Engr. Fareed was Prof. Dr. Sahar Noor, former Dean Faculty of Mechanical Chemical and Industrial Engineering. The topic of their Ph.D thesis were "Mutli-objective schedule optimization framework for sustainable project management" and "Selection and manufacturing optimization of material for aircraft skin" respectively. Both the scholars presented their research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee.

### Engr. Zain-ulAbidin successfully defended Ph.D thesis

The Ph.D thesis defense Examination of Engr. Zain-ul-Abidin, Department of Civil Engineering, UET Peshawar was successfully held August 28th, 2023. He presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. The research topic of Zain was "Seismic performance evaluation of strengthened indigenous brick masonry infill panel walls in reinforced concrete structure" supervised by Prof. Dr. Khan Shahzada, Department of Civil Engineering, UET Peshawar. His Research Evaluation Committee (REC) included of Prof. Dr. Syed Muhammad Ali, Department of Civil Engineering, UET Peshawar, Dr. Sajjadwali Khan, Associate Professor Jaloza campus, UET Peshawar, Brgd. (R) Dr. Sarfraz Ali, Ex-dean MCE, Risalpur and Dr. Shahzad Rahman, Managing Director, SMEC General consultant, Lahore Pakistan. Engr. Zain-ul-Abidin is serving as lecturer at the Department of Civil Engineering, UET Peshawar and has published five (05) research papers in national and international reputed journals.

### Engr. Atif Sardar successfully defended Ph.D thesis

The Ph.D thesis defense Examination of Engr. Atif Sardar, Department of Mechatronics Engineering, UET Peshawar was successfully held on August 29th, 2023 at the Video Conference Hall, UET Peshawar here today. The research topic of Engr. Atif was "Energy harvesting for wearable devices" supervised by Prof. Dr. Farid Khan, Department of Mechatronics Engineering, UET Peshawar. His Research Evaluation Committee (REC) included Engr.

Maqsood Jan Chief Manager, National Development Complex (NDC), Islamabad, Dr. M. Irfan Khattak, Associate Prof. Department of Electrical Engineering, UET Peshawar, Dr. Shahzad Anwar, Associate Prof. Department of Mechatronics Engineering, UET Peshawar and Dr. Riaz Muhammad, Associate Prof. Department of Mechanical Engineering, CECOS University, Peshawar. Engr. Atif Sardar is serving as Lecturer at Center for Advanced Studies in Energy, UET Peshawar. So far, he has published five (05) research papers in national and international reputed journals.

### Engr. Rehmat Ullah successfully defended Ph.D thesis

The Ph.D thesis defense examination of Engr. Rehmat Ullah, Department of Computer Systems Engineering, UET Peshawar was successfully held on September 4, 2023. The research topic of Engr. Rehmat was "Centered Time Cartograms: Construction and Usability" supervised by Prof. Dr. Laiq Hasan, Chairman Department of Computer Systems Engineering, UET Peshawar. His Research Evaluation Committee (REC) included Prof. Dr. Amjad Ullah (Dean Faculty of Electrical & Computer Engineering, UET Peshawar), Dr. Salman Ahmed (Assistant Prof. Department of Computer Systems Engineering, UET Peshawar), Dr. Muhammad Asif (Assistant Prof. Department of Electronics, University of Peshawar) and Engr. Saad Khan Zahid (Director RakaposhiPharma& Senior Vice President Sarhad Chamber of Commerce and Industries, Peshawar). Engr. Rehmat is serving as Lecturer at Department of Computer Systems Engineering, UET Peshawar. He has published three research articles in reputed international journals and has presented his work in reputed international conferences.

### Engr. Yasir Saleem Afridi successfully defended Ph.D thesis.

The Ph.D thesis defense examination of Engr. Yasir Saleem Afridi, Department of Computer Systems Engineering, UET Peshawar was successfully held on September 4, 2023. He presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. The research topic of Engr. Yasir was "Condition Monitoring and Prognostics for Sustainable Energy Solutions" supervised by Prof. Dr. Laiq Hasan, Chairman Department of Computer Systems Engineering, UET Peshawar. His Research Evaluation Committee (REC) included Prof. Dr. Mukhtar Ullah Chairman, Department of Electrical Engineering, NUCES FAST Islamabad, Dr. Faisal Nadeem, PE, Public Sector Organization, Islamabad, Dr.

Yousaf Khan, Associate Professor Department of Electrical Engineering, Jalozai Campus UET Peshawar and Dr. Salman Ahmed, Assistant Prof. Department of Computer Systems Engineering, UET Peshawar.

Engr. Yasir Saleem Afridi is currently serving as a Lecturer at Department of Computer Systems Engineering, UET Peshawar. He has published multiple research articles in reputed international journals and has also authored a book chapter in Springer Nature series book.

## **Engr. Usman Ali Successfully Defended Ph.D thesis**

Engr. Usman Ali successfully defended his Ph.D. dissertation on September 8, 2023. His research focused on the "Design and Analysis of Metamaterial Based Wearable Antennas for Body-Centric Communications". Engr. Usman Ali presented his research during a public seminar, followed by a Viva-Voce examination by the Examination Committee. The members of the Research Evaluation Committee (REC), included Prof. Dr. Sadiq Ullah, Chairman Department of Telecommunication Engineering, Mardan Campus (Supervisor), Prof. Dr. Yasir Amin, Chairman, Department of Telecommunication Systems, UET, Taxila, Dr. Muhammad Irfan Khattak, Associate Professor, Department of Electrical Engineering, UET Peshawar, Dr. Tariq Rahim, General Manager Electronics, National Engineering and Scientific Commission (NESCOM), Islamabad and Dr. Naveed Mufti, Assistant Professor, UET Mardan. They extended their congratulations to Engr. Usman Ali on his successful Ph.D. defense.

## **Engr. Muhammad Abas successfully defended Ph.D thesis**

The Ph.D thesis defense Examination of Engr. Muhammad Abas, Department of Industrial Engineering, UET Peshawar was successfully held on November 8, 2023. He presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. The research topic of Engr. Abas was "Optimization of process parameters of fused deposition modeling in the development of assistive devices used in physical rehabilitation of People with Disabilities" supervised by Prof. Dr. Sahar Noor, Dean Faculty of Mechanical, Chemical and Industrial Engineering, UET Peshawar while Dr. Tufail Habib, Department of Industrial Engineering served as his Co-Supervisor. His Research Evaluation Committee (REC) also included of Mr. Syed Muhammad Ilyas, CEO Paraplegic Center Peshawar ((PCP), Dr. Imran Ahmed, Department of Industrial Engineering, UET Peshawar, Dr. Muftooh Ur Rehman, Associate Professor, CECOS University Peshawar. Engr. Abas is serving as lecturer at the Department of industrial

Engineering, UET Peshawar and has published four (04) research impact factor papers in international reputed journals.

## **Muhammad Faisal Abrar successfully defended Ph.D thesis**

Muhammad Faisal Abrar successfully defended his Ph.D. dissertation on December 14, 2023 under the supervision of Dr. Muhammad Sohail Khan, Assistant Professor, Department of Computer Software Engineering, UET Peshawar (Mardan Campus). The title of his PhD thesis was "A Framework for Ensuring Information Credibility in The Digital Preservation Process". He presented his research during a public seminar, followed by a Viva-Voce examination by the Examination Committee. Currently, Muhammad Faisal Abrar is serving as a lecturer in the Department of Computer Science, UET Mardan. He has published multiple articles in well reputed journals of which Two W category publications have been derived from his PhD research. The members of the Research Evaluation Committee (REC), including Prof. Dr. Sadaqat Jan; Dr. Muhammad Faisal Nadeem; Dr. Muzammil Khan, and Dr. Shams Ur Rahman were present on the occasion. Chairman Department of Computer Software Engineering also attended the defense. They all extended their congratulations to Muhammad Faisal Abrar on his successful Ph.D. defense. PhD Defense held

## **Engr. Taimur Ahmed Khan successfully defended Ph.D thesis**

Engr. Taimur Ahmed Khan successfully defended Ph.D thesis under the supervision of Dr. Muhammad Irfan Khattak, Associate Professor, Department of Electrical Engineering at UET Peshawar on February 2, 2024. The dissertation titled "Adaptive Conformal Beam forming Array Antenna System with Autonomous Mutual Coupling Reduction and Desired Pattern Recovery in Deformed Structures for 5G Communication," was presented in a public seminar followed by a Viva-Voce examination conducted by the Examination Committee. In addition to his accomplishment as a Ph.D. candidate, Engr. Taimur Ahmed Khan is also a faculty member in the Department of Electrical Engineering, UET Peshawar. He has published multiple articles in well reputed journals from his PhD research. The Research Evaluation Committee (REC), comprising Prof. Dr. Gulzar Ahmad, Dr. Salman Ahmed, Dr. Fiaz Ahmad, and Engineer PirAimal, was in attendance during the defense.

## **Engr. Arshad Ali Khan successfully defended Ph.D thesis**

The Ph.D Public Defense of Engr. Arshad Ali Khan was held here today. Prof. Dr.

Sahar Noor, Dean MCI, and the Registrar Prof Dr. Khizar Azam, university officials and faculty attended the defense. Engr. Arshad Ali Khan research topic was "The effect of micro-filler based epoxy coating on the corrosion resistance of aluminum alloy". Supervised by Prof. Dr. Afzal Khan (Mechanical Engineering Department UET Peshawar). The research was carried out in collaboration with the National Centre for Physics, Islamabad. The examination committee was comprised of Prof. Dr. Sayed Riaz Akbar Shah, Prof. Dr. Shaukat Ali Shah, Prof. Dr. Liaquat Ali, Dr. Zainab Zafar (Co-supervisor), and Prof. Dr. Afzal Khan (Supervisor/chairman REC). The scholar has published three publications of international repute.

### **Engr. Lubna Successfully Defended Ph.D thesis**

Engr. Lubna successfully defended her Ph.D dissertation under the supervision of Prof. Dr. Sadiq Ullah, Chairman Department of Telecommunication

Engineering, UET Peshawar (Mardan Campus) and Co-Supervision of Dr. Naveed Mufti on January 31, 2024. Her research focused on the "Design, Fabrication and Analysis of RFID Tag Antennas for IoT Applications". Engr. Lubna presented her research in a public seminar followed by a Viva-Voce examination by the Examination Committee. She has contributed to the field with nine (09) research articles published in reputed journals and conferences. The members of the Research Evaluation Committee (REC) included Dr. Nasir Ahmed, Associate Professor, Department of Computer Systems Engineering, UET Peshawar, Dr. Tariq Bashir, Associate Professor, Department of Electrical Engineering, COMSATS, Islamabad, Dr. Sahib Khan, Assistant Professor, Department of Telecom Engineering, UET Mardan and Mr. Abu Bakar Nisar Alvi, Founder / Chief Executive Officer, RADEC Technologies, Rawalpindi.

# Student Enrollment & Degree Awarded Annually

## CHAPTER 8



## Basic Enrolment (Gender-Wise) 2023-24

B.Sc.			M.Sc.			Ph.D.		
Male	Female	Total	Male	Female	Total	Male	Female	Total
1412	80	1492	235	33	268	14	01	15

## Degrees Awarded, Peshawar (Main Campus) B.Sc. 2023-24

S.No.	Department	No. of Degrees
1	Agricultural Engineering	09
2	Civil Engineering	177
3	Chemical Engineering	61
4	Computer Systems Engineering	88
5	Electrical Engineering	150
6	Industrial Engineering	26
7	Mechanical Engineering	130
8	Mining Engineering	23
9	Mechatronics Engineering	30
10	Computer Sciences & IT	78
Total		772

## Degrees Awarded Satellite Campuses (B.Sc.)

Campus		Department	No. of Degrees
<b>Bannu Campus</b>			
	1	Civil Engineering	61
	2	Electrical Engineering	29
<b>Abbottabad Campus</b>			
	1	Electronics Engineering	16
	2	Architecture	42
<b>Jalozai Campus</b>			
	1	Civil Engineering	73
	2	Mechanical Engineering	33
	3	Electrical Engineering	38
	4	Industrial Engineering	26
	5	Computer Science & IT	16

<b>Degrees Awarded (M.Sc. &amp; Ph.D)</b>			
	1	M.Sc.	69
	2	Ph.D.	45

# Strengthening Physical Infrastructure

## CHAPTER 9

## Development Projects (completed)

### ESTABLISHMENT OF JALOZAI CAMPUS

Location:	At kilometer 11 on Pabbi-Cherat Road, Jalojai, District Nowshera,
Date of Approval of RPC-1	May 2020
Extended Date of Completion:	June 2024
Revised PC-I	Submitted to Planning Commission, Islamabad for approval
Sponsoring Agency:	HEC, Islamabad
Consultants:	M/s National Engineering Services Pakistan (Pvt.) Limited (NESPAK) only (Design in Progress)
<b>Approved Revised PC-1 Cost:</b>	Rs. 6535.325 Million
Total area of the Campus	402 acre
Total Covered area	602,346sq
Live-in strength:	3,240 students
HRD Component:	95 Nos. Overseas MS/PhD scholarships

#### Objectives

- Construct 0.6 million square feet of building area to house University infrastructure.
- Establishment of five Engineering departments at Undergraduate and Postgraduate level.

- Train 105 faculty members to obtain PhD Degrees (Overseas) as HRD program.
- Increase the student enrollment by 3240
- Improve quality of education and increase relevance to the national needs by developing and funding research facilities for faculty.

At Jalojai Campus, five disciplines including Civil Engineering, Electrical Engineering, Mechanical Engineering, Industrial Engineering and Computer Science have already been introduced. Under its Human Resources Development program, 95 Faculty members were sent abroad for MS /PhD higher education to teach and impart state-of-the-art scientific and technical knowledge to the students.

#### Status of Civil Works

- 04 Nos. Academic Buildings alongwith separate buildings for modern and well-equipped laboratories, annexed with the main buildings, are completed and occupied by UET Peshawar.
- 07 Nos. Hostels with a capacity to accommodate 200 students each, with spacious buildings encompassing basic facilities, are completed and taken over by UET Peshawar.

#### Infrastructure Package I

(I) Roads and Walkways	Completed
(ii) Water supply	Completed
(iii) Sewerage	Completed
(iv) Boundary wall	Completed
(v) Flood channels	Completed
(vi) Electrification	Completed





## Package-II

(i) Road and Walk Ways	Completed
(ii) RCC Bridge on Flood Channel-I	Completed
(iii) Construction of Promenade	Completed
(iv) Construction of 52 Nos. Faculty & Staff Residences	Completed
(v) Construction of 04 Nos. Student Hostels	Completed
(vi) External Sui Gas Supply Works	Completed

## Status of Human Resource Development

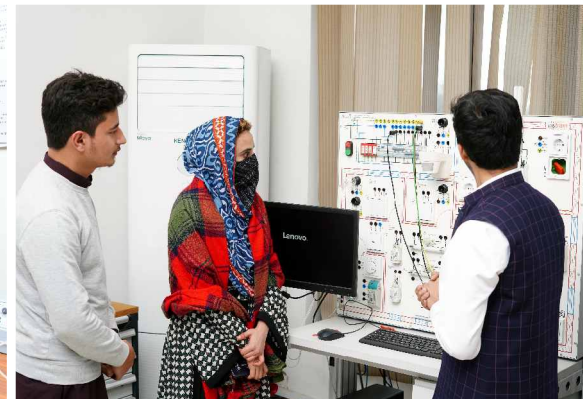
So far, 95 Nos. scholars have been sent abroad to different universities of USA, UK and other European countries, out of which 59 scholars have joined the University after completing their MS/PhD studies.

## Status of Lab-equipments

Lab equipment for all disciplines have been procured installed commissioned and functional.

## Academics

- Regular classes of Civil, Electrical, Industrial, Mechanical Engineering and Computer Science Departments are being held at Jaloza Campus.
- Seven student hostels are functional.



## STRENGTHENING OF ABBOTTABAD CAMPUS

The project was approved by DDWP in its meeting held on 20th March 2020 for a total cost of Rs.1,500.00 million. An amount of Rs.50.00 million is allocated as PSDP allocation for the FY 2021-23, against which no release has been made as yet. Component wise allocation of the project is as under:

S.No	Component (s)	PC-I Provision	Upto Date Expenditure
1	Civil Works	824.17	771.66
2	Laboratories Equipment and Teaching Aid etc	540.65	17.62
3	Furniture/Fixture	33.51	—
4	ICT Services for the Campus	35.28	23.92
5	Books/Journals	8.00	2.38
6	Transport /Logistics	21.85	21.33
7	Project Execution Staff	14.04	19.51
8	Miscellaneous @ 1.5% of the capital cost	22.50	3.75
<b>Total in Million Rs.</b>		<b>1500.000</b>	<b>860.17</b>



## STRENGTHENING OF LAB FACILITIES IN FIVE LEADING ENGINEERING UNIVERSITIES

(UET Peshawar, Taxila, Lahore, Khuzdar & NED Karachi)

The project is aimed to address the immediate needs of the leading engineering universities of Pakistan by providing latest teaching and R&D equipment to enhance the lab facilities and to improve the visibility of these engineering universities in the world ranking. This intervention will bring the state-of-the-art equipment for various engineering labs; replace the obsolete equipment, upgrade existing laboratories and renovate/construct labs infrastructure. The total approved cost of this project is Rs. 6,636.506 million in which UET Peshawar has been committed Rs. 1194.304 million.

# Strengthening Technological Infrastructure

## CHAPTER 10



## IT Center (CMS)

### Campus Management Solutions (CMS) / IT Center

UET Peshawar with its core mandate to provide “quality education” is on a continuous path to bring new technologies in the academic processes. In 2006, UET Peshawar under the auspices of HEC took an initiative and established an advanced network infrastructure through the Campus Management Solutions (CMS) software services. The CMS, a web-based portal was officially launched in 2008 at UET Peshawar with an aim to provide faculty/staff and the students with immediate access to real-time information that helps to streamline the processes, reduce manual handling and building a database that effectively manages student accounts. In 2012, CMS was transformed into Information Technology Center by adding a wide spectrum of services to its domain. These services are offered across the campus which include CMS software services; providing 24/7 internet services on campus and hostels; official email services; VPN to access HEC Digital Library for the students and faculty/staff; video conferencing; issuance of Microsoft licensed softwares to the departments; managing the official website: [www.uetpeshawar.edu.pk](http://www.uetpeshawar.edu.pk) with the latest information on academic and research programs, and IT Help Desk Support. The University also started the Smart Campus (Eduroam), a world-wide education roaming service in 2019 which has further enhanced the internet connectivity for the students and faculty/staff across campus. Over the years, the integration of information technology into academic and administrative processes has completely transformed the learning environment and student lifestyle on campus.

### Smart Campus

Smart Education is a transformative concept that modernizes traditional pedagogical methods through the integration of Information and Communication Technologies (ICT). This initiative aligns with the Government of Pakistan’s vision to enhance digital learning, particularly in higher education institutions, by leveraging the distribution of 500,000 laptops/computers to students nationwide. These devices, equipped with touch-screen and tablet functionality, facilitate both in-class and remote learning, significantly enhancing students' academic engagement. To further support ubiquitous computing, UET Peshawar in collaboration with the Higher Education Commission (HEC) has launched the Smart Campus initiative. This project provides blanket WiFi coverage across the university, complementing the Smart Bags initiative, which includes 2-in-1 detachable laptops. By integrating digital tools into the learning environment, this initiative fosters student engagement, enhances personalized learning experiences, promotes innovation, and strengthens educators' digital pedagogy. The installation of Smart Campus infrastructure is progressing at a rapid pace, and in the coming months, UET Peshawar’s students, faculty, and administration will fully benefit from this advanced technological ecosystem.

### Digital Library

The University Library contains one of the greatest collections of latest books and manuscripts related to various engineering and computing disciplines. The Library also offers facilities to students to access electronic journals under “Digital Library Program”, an HEC funded project for public and private sector universities. (<http://www.digitallibrary.edu.pk/nwfpuet.html>)

### Video Conferencing

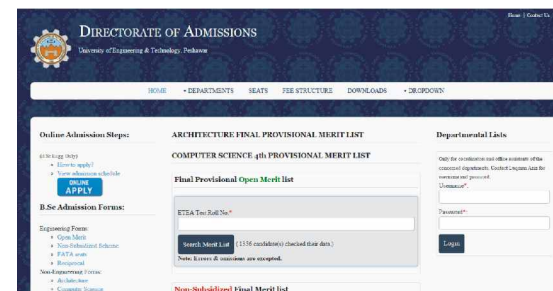
UET Peshawar, in collaboration with HEC, established a video conferencing room at UET Peshawar Main Campus. The video conferencing room is equipped with latest video conferencing equipment and sound system. It is being used for holding multi-party conferences without travelling, delivering and attending courses, and interacting with other academics partners across the globe. Videoconferencing is already well established with a growing number of educational centers all over



## Online Admissions

the world and it is a great step for UET Peshawar in dissemination and acquisition of learning.

UET Peshawar has completely transformed its manual admissions to online system for engineering and non-engineering undergraduate programs. It has gone entirely online by giving complete information ranging from online registration for ETEA test, eligibility criteria, application process, seats allocation, disciplines and online payments information. (<http://www.enggentrancetest.pk>).



## Data-Centre

As per HEC desired standards, UET Peshawar has developed a state of the art Data-Centre that is equipped with IBM Servers, CISCO Firewall and Layer-3 Switches, Network Monitoring System, uninterrupted power supply, fire suppression system, cooling system and CCTV monitoring system to make available the CMS services 24/7 for the associated stockholders.

## Add-On Services

IT Centre (CMS) provides VPN (Virtual Private Network) facility to the faculty members and students to have access to digital library outside the university Campus. IT Centre provides official e-mails addresses to the faculty members, students and administration. With the initiative of HEC and through a service package named "Microsoft for all" IT Centre also provides an online access to the free online licensed software of Microsoft.

## Implementation of ERP Software System

ERP is the concept of computerization of all the business process, departments and sections of an institution to integrate, automate and produce intelligent report for current assessment and future planning. This concept pave the way to implement the vision of the government of Pakistan towards a smart and paperless environment. This comprehensive and coordinated computerization system encapsulate the areas of

Human Resource Management	Business Intelligence
Financial Management	Inventory system
Procurement Management System	Hostels Management
Online admission	Student Enrollment
Student Financial	Grade Tracking
Examination	Alumni
Quality Enhancement Cell	Object Based Education
Payroll	Budgeting,
Auditing	

This mile stone initiative is at the last stage of implementation and will be at the fingertips of each stakeholder in the coming academic session.

# Sports

## CHAPTER 11



## UET PESHAWAR INTER-DEPARTMENTAL SPORTS CHAMPIONSHIP & INTER-HOSTEL SPORTS 2024

The closing ceremony of UET Peshawar Inter-departmental Sports Championship and Inter-Hostel Sports was held on March 8, 2024 at Footstall Ground, UET Peshawar. The week long sports championship was organized by the Directorate of Sports and UET Sports Society. The Vice Chancellor Prof. Dr. Qaisar Ali, was the chief guest of the closing ceremony. He said, the championship was a great success and provided a platform for the students to showcase their talents and sportsmanship. He appreciated the efforts of Former Dean Prof. Dr. Sahar Noor, Chairman Sports Committee, Engr. Fazle Yazdan, chief organizer sports championship, Mr. Muhammad Ali, Director Sports and UET Sports Society for organizing the event and providing the students with an opportunity to participate in healthy competition. At the end, the Vice Chancellor awarded trophies for 1st, 2nd, and 3rd positions to the winning teams. The Civil Engineering Department was declared the "Overall champion" of the Sports championship.



## Sports Gala 2024 held at UET Abbottabad Campus

A week long Sports Gala 2024 of UET Abbottabad Campus concluded to 10th June, 2024. The Campus Coordinator, Engr. Akhtar Munir Marwat spoke as the chief guest at the closing and stressed the importance of sports for the students. He also appreciated the Regional Director Sports, Hazara Division, Abbottabad, Mr. Aqib Raqeeb for providing sports kits and goods to the UET Abbottabad Campus that contributed towards making the event a huge success. He assured full support in holding such events for the students in future. Later, the Coordinator gave away prizes to the winners and runners-up teams of different games.







## Chemical Futsal League Held

The closing ceremony and final match of Department of Chemical Engineering futsal league held November 9, 2023 in Futsal ground, UET Peshawar. The chief guest of the ceremony was Prof. Dr. Sahar Noor, former Dean MCI. The Final match was played between boys of 5th Semester and 1st Semester which was won the 5th semester by two goals to none. The runner up showed great resilience and fought well till the end for the title. The Ceremony ended with some words of appreciation from the honorable Chief Guest Prof. Dr. Sahar Noor, Dean MCI followed by prize distribution. The chief guest congratulated the winning team and appreciated the efforts of other teams and organizers. The students of Department of Chemical Engineering expressed their deep gratitude to all the teachers and management who spared their precious time and managed to be with them. They said, this really helped us get more motivated and engaged in extracurricular activities! We are also thankful to all the organisers and ground staff who have worked really hard to make this event worthwhile.



## DCSE organized the Sports Week

The Department of Computer Systems Engineering (DCSE) organized a "Sports Week" from November 31st - December 2, 2023. Prof. Dr. Sahar Noor, Dean Faculty of Mechanical, Chemical, and Industrial Engineering, declared the Sports Week open at the opening ceremony. Prof. Dr. Khizar Azam Khan, Registrar, Dr. Imad Ullah Khan, Chief Proctor, Dr. Samad Baseer, Director Clubs, Muhammad Ali, Director of Sports, and other senior officials of UET Peshawar were present on the occasion. Various competitions were held among the four batches of Computer Systems Engineering, UET Peshawar.

## Intra-Departmental Sports Week-2023 held at USPCASE

The Intra-Departmental Sports Week-2023, USPCAS-E UET Peshawar commenced the other day at the auditorium of USPCAS-E, Hayatabad. Mr. Muhammad Ali, Director Sports UET Peshawar was the chief guest of the opening ceremony who declared the Sports open in the presence of Dr. Adnan Dawood Khan, Director USPCAS-E, Dr. Amad Ullah Khan, Chief Proctor and other senior faculty and officials. Various competitions including Volley Ball, Footstall, Table Tennis, Carom Board, Chess and ludowere held among the students' teams from 6th November – 10th November, 2023 during the sports week.



# Finance

## CHAPTER 12

## Revised Estimates 2023-24 & Budget Estimates 2024-25

### Consolidated Summary of Income & Expenditure

Amount (Rs. in million)

Particulars	Actual for 2022-23	Budget Estimates 2023-24	Revised/Actual Estimates 2021-23			Budget Estimates 2024-25
			Actual July, 2023 to May, 2024	Actual June, 2024	(Total for 2023-24 (Col: 4+5)	
1	2	3	4	5	6	7
Opening Balance	(1141.581)	(1,322.998)	(1,322.998)		(1,322.998)	(1,377.229)
<b>A) INCOME</b>						
<b>I. HEC Grants</b>						
i. Annual Grant	868.266	905.809	588.775	317.034	905.809	870.800
ii. Supplementary Grants :	—					
a. Additional Grant from HEC for HEDP	0.000	0.000	0.000	60.702	60.702	0.000
b) Additional Grant from KP Govt	173.000		150.000	182.000	332.000	0.000
<b>Sub Total HEC Supplementary Grant:</b>	<b>173.000</b>	<b>0.000</b>	<b>150.000</b>	<b>242.702</b>	<b>392.702</b>	<b>0.000</b>
<b>Total HEC Grant</b>	<b>1,041.266</b>	<b>905.809</b>	<b>738.775</b>	<b>559.736</b>	<b>1,298.511</b>	<b>870.800</b>
<b>II. Own Income</b>						
i. Regular Fee Income	402.383	615.357	436.956	113.613	550.569	790.410
ii. Self Sustained/Support Income	24.110	18.350	18.020	0.300	18.320	0.000
iii. Non-Subsidized/Self Finance Income	437.963	517.550	317.759	-8.886	308.873	327.600
iv. Other Sources (Miscellaneous Income)	331.275	374.939	368.619	17.735	386.354	416.934
<b>Sub Total Own Income:</b>	<b>1,195.731</b>	<b>1,526.196</b>	<b>1,141.354</b>	<b>122.762</b>	<b>1,264.116</b>	<b>1,534.944</b>
<b>Total Resources (A):</b>	<b>2,236.997</b>	<b>2,432.005</b>	<b>1,880.129</b>	<b>682.498</b>	<b>2,562.627</b>	<b>2,405.744</b>
<b>B) EXPENDITURE</b>						
i. Pay and Allowances	1570.140	1616.790	1330.245	442.662	1,772.907	2064.898
ii. Other Charges	848.274	794.653	734.689	596.040	1,330.729	859.963
<b>Total Expenditure (B):</b>	<b>2,418.414</b>	<b>2,411.443</b>	<b>2,064.934</b>	<b>1,038.702</b>	<b>3,103.636</b>	<b>2,924.861</b>
<b>(C) SURPLUS / DEFICIT (A - B):</b>	<b>(181.417)</b>	<b>20.562</b>	<b>(184.805)</b>	<b>(356.204)</b>	<b>(541.009)</b>	<b>(519.117)</b>
Accumulated Deficit	(1,322.998)	(1,302.436)	(1,507.803)	(356.204)	(1,864.007)	—
Adjustment of Liabilities	—	—	—	—	759.694	—
Accumulated Deficit After Adjustment	—	—	—	—	(1,104.313)	—
Add Pension Liabilities	—	—	—	—	(272.916)	(149.218)
<b>Total Deficit Including Pension Liabilities</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>(1,377.229)</b>	<b>(2,045.564)</b>

## Financial year 2023-24 at a Glance

### Statement of Receipts & Expenditures & Source of Financing

Particulars	Amount (Rs. in million)		Amount (Rs. in million)
	Approved Budget for CFY 2023-24 Year Total	Receipts & Expenses 2023-24 Current Qtr	Cumulative Total
<b>1. Opening Balance</b>	(978,164,000)	(1,504,414,094.16)	(1,322,997,721.39)
<b>2. Total Grants &amp; Donations [a - f]</b>	<b>906,000,000</b>	<b>1,319,232,347</b>	<b>2,058,008,197</b>
a. Federal Government (Annual)	906,000,000	317,033,150	905,809,000
b. Additional Grant by Provincial Government	—	—	—
i. Budgetary Supported	—	182,000,000	332,000,000
ii. Increase in Pay & Allowances	—	—	—
iii. Increase in Pension	—	—	—
c. Special Grant from HEC for Solarization	—	50,000,000	50,000,000
d. HEC Special Grant for Research (Digital Library)	—	10,702,662	10,702,662
e. Liabilities Adjustment (On direction of Senate)	—	759,496,535	759,496,535
<b>3. Total Own Resources</b>	<b>1,527,946,000</b>	<b>236,767,240</b>	<b>1,264,116,053</b>
<b>3 (i) Students Related Income [3(i) a - 3(i) d]</b>	<b>1,336,446,000</b>	<b>209,866,668</b>	<b>1,011,961,926</b>
Regular Fees	727,157,000	145,291,263	612,191,717
Self Sustained/Support	18,350,000	—	18,019,624
Self Finance Income/Non-Subsidized	517,550,000	61,928,733	308,875,360
Hostel Charges, etc.	70,389,000	2,601,672	70,400,455
a. On Campus Students (sub-total)	1,333,446,000	209,821,668	1,009,487,156
b. Affiliated College/Institutions' Students	3,000,000	45,000	2,474,770
c. External (Private) Students	—	—	—
<b>3 (ii) Other Venues of Income [3(ii) a - 3(ii) f]</b>	<b>191,500,000</b>	<b>26,900,572</b>	<b>252,154,126</b>
a. Income from Collaborative and Contract Research	—	—	—
b. Income from Consultancy & Testing	140,800,000	82,499,864	147,190,763
c. Income from Intellectual Property	—	—	—
d. Income from Regeneration & Development Programs	—	—	—
e. Alumni	—	—	—
f. Any Other Income	50,700,000	(55,599,292)	104,963,363
<b>3 (iii) Endowments</b>			
<b>A. Total Available Resources [1+2+3]</b>	<b>1,455,782,000</b>	<b>51,585,493</b>	<b>1,999,126,528</b>
<b>4 (i). Expenditure from Federal Govt. Grant</b>	<b>1,194,902,246</b>	<b>504,797,991</b>	<b>1,298,511,662</b>
a. Faculty Salary	534,433,000	227,682,544	490,175,585
b. Salary of Officers & Staff -Teaching Departments	100,000,000	53,737,628	150,289,002
c. Salary of Officers & staff -Non-Teaching Departments	470,000,000	184,221,081	618,732,347
d. TTS Faculty Salary/ Gratuity	65,754,000	30,931,290	30,931,290
e. Other Establishment Charges	—	—	—
f. Non Salary Expenses / Other Charges (Library Exp)	1,615,246	6,685	164,675
g. Research	8,100,000	3,082,660	3,082,660
h. Need Based Scholarships	15,000,000	5,136,103	5,136,103

Particulars	Amount (Rs. in million)		Amount (Rs. in million)
	Approved Budget for CFY 2023-24 Year Total	Receipts & Expenses 2023-24 Current Qtr	Cumulative Total
<b>4 (ii). Expenditure from Own Income (all resources)</b>	<b>1,235,733,754</b>	<b>630,838,762</b>	<b>1,784,666,126</b>
a. Faculty Salary	300,000,000	–	372,782,872
b. Salary of Officers & Staff -Teaching Departments	10,000,000	–	9,993,900
c. Salary of Officers & staff -Non-Teaching Departments	150,000,000	–	100,000,000
d. TTS Faculty Salary/ Gratuity	–	–	–
e. Other Establishment Charges	–	–	–
f. Non Salary Expenses / Other Charges	775,733,754	630,838,762	1,301,889,354
g. Research			
<b>5. Total Establishment Charges [4 (i) a-e + 4 (ii) a-e]</b>	<b>1,630,187,000</b>	<b>496,572,543</b>	<b>1,772,904,996</b>
<b>6. Total Non Salary Expenses [4 (i) f-g + 4 (ii) f-h]</b>	<b>800,449,000</b>	<b>639,064,210</b>	<b>1,310,272,792</b>
<b>B. Total Expenditures [ 5 + 6 ]</b>	<b>2,430,636,000</b>	<b>1,135,636,753</b>	<b>3,083,177,788</b>
<b>C. Surplus / Deficit [A - B]</b>	<b>(974,854,000)</b>	<b>(1,084,051,260)</b>	<b>(1,084,051,260)</b>

## Statement of Accounts as on 30.06.2024

Particulars	Amount	Particulars	Amount
Opening Balance	(1,322,997,721.39)	Advances	56,811,956.91
Grant (Federal)	966,511,662.00	Balance as per Bank Book	45,136,118.60
Grant (Provincial)	332,000,000.00	Receivables	37,404,240.00
Liabilities Adjustment (On direction of Senate)	759,496,535.00		
Receipt	1,264,116,052.56		
<b>Total</b>	<b>1,999,126,528.17</b>		
Less Expenses			
Other Expenditure	1,310,272,792.25		
Pay & Allowances	1,772,904,996.00		
<b>Total</b>	<b>3,083,177,788.25</b>		
Closing Balance	(1,084,051,260.08)		
Liabilities	1,223,403,575.59		
<b>Total</b>	<b>139,352,315.51</b>	<b>Total</b>	<b>139,352,315.51</b>



# Funds Generation / Development

## CHAPTER 13

Endowment Fund Project		
S.No.	Description	Amount (Rs. in million)
A	Income/Reciept	645.993
B	Less Expenditure	109.367
C	<b>Balance (A-B)</b>	<b>536.625</b>
D	Investment	500.000
E	<b>Net Cash Balance as per book (C-D)</b>	<b>36.626</b>

Faculty Research Grant / Commercialization		
S.No.	Description	Amount (Rs. in million)
1.	Faculty Research Grants for the FY 2023-24.	1686.764

Developmental Budget		
S.No.	Project	Amount (Rs. in million)
1.	Strengthening of Abbottabad Campus	1500.000

Consultancy Services / Lab Utilization		
S.No.	Description	Amount (Rs. in million)
1.	Consultancy / Lab Utilization for the FY 2023-24	37.038

# University-Industry-Government Liaison

## CHAPTER 14

### Paraplegic Center (PCP) Peshawar and UET Peshawar ink MoU

A memorandum of understanding (MOU) was signed between the Paraplegic Center (PCP) Peshawar and UET Peshawar on August 9, 2023. The MoU is aimed to strengthen research in the development of assistive technology through academia- industry linkage. The Chief Executive Paraplegic Center Peshawar Dr. Syed Muhammad Ilyas and Dean Faculty of Mechanical Industrial and Chemical Engineering UET Peshawar Prof. Dr. Sahar Noor signed the document in presence of senior officials of PCP and UET Peshawar.

This initiative is a milestone achieved in providing essential assistance to the mobility-impaired patients of Pakistan. He said, the SMaCT wheel chairs, manufactured successfully by the PCP was only possible with the help of the precise designing done by the expert engineers of UET Peshawar. PCP is a successful model of third work country which has set an example for comprehensive physical rehabilitation that helps towards promoting mental, emotional and social well-being of people with disabilities.



### MoU between Gems & Jewellery Centre of Excellence (GJCoE), UET Peshawar, Gemmological Institute China (GIC) University of Geosciences and Qingdao Preschool Education College

The 2023 International Gems and Jewelry Academic Conference, organized by the Gemmological Institute (GIC), China University of Geosciences Wuhan, China was held on October 21, 2023 at Qingdao City of Shangdong Province. The Guest of Honor of the event was the Former VC UET Peshawar Prof. Dr.

Iftikhar Hussain. On the sidelines, the MoU signing ceremony between Gems & Jewellery Centre of Excellence (GJCoE), UET Peshawar, Gemmological Institute (GIC), China University of Geosciences and Qingdao Preschool Education College was held at Qingdao, Shangdong Province. The Vice and Deputy Party Secretary, China University of Geosciences Prof. Dr. Fu Wang and Miss Fu Rongyun, President of Qingdao Preschool Education College (QDPEC) signed the document.



### CISNR, PEDO sign MoU

CISNR UET Peshawar and the Pakhtunkhwa Energy Development Organization (PEDO) signed a Memorandum of Understanding (MoU) on December 6, 2023. The MoU was signed by the Former Vice Chancellor





Prof. Dr. Iftikhar Hussain and Mr. Muhammad Naeem Khan, CEO PEDO in presence of senior officials. Dr. Syed Sarfaraz Ali Shah, Advisor to the Chief Minister Khyber Pakhtunkhwa for Planning & Development, Energy & Power and Minerals Development was the chief guest on the occasion. The Purpose of MoU is to work jointly in five key areas including implementation of smart metering and billing in Chitral region, implementation of early warning, safe and security system for all the remote micro-hydro power plants of PEDO, implementation of framework of KP NEECA, implementation of predictive maintenance system on all the power plants of PEDO and implementation of feasibility of utilization of unused electricity in remote regions by PEDO.

### **UET Peshawar and KIU Gilgit-Baltistan ink MoU**

UET Peshawar, entered into a collaboration with Karakoram International University (KIU), Gilgit-Baltistan on April 26, 2024. The Vice Chancellor Prof. Dr. Qaisar Ali and Prof. Dr. Attaullah Shah, Vice Chancellor of KIU, Gilgit-Baltistan signed MoU, aimed to establish a framework for academic collaboration. Through this MoU, both universities aim to promote mutual understanding, facilitate joint initiatives, encourage faculty and student visits, explore commercialization opportunities and ensure equitable partnerships.



### **UET Peshawar and All Pakistan Commercial Exporters Association (APCEA) ink MoU**

UET Peshawar and All Pakistan Commercial Exporters Association (APCEA) signed a memorandum of understanding on June 6, 2024. The MoU was signed by Secretary Industries Khyber Pakhtunkhwa Syed Zulfiqar Ali Shah and the Vice Chancellor Prof. Dr. Qaisar Ali. It is aimed to promote Gems & Minerals trade and export through APCEA and conduct academic expertise and commercialization of specialized services through UET, Peshawar to achieve help towards economic development of Pakistan and pursue their mutual interests in finding solutions through Research and Development. Through this MoU, the government will be able to approach TDAP and set up regulations and policies to ensure certification of precious gemstones for export. Additionally an online trading studio will also be established that will allow our traders to do online gemstone trading and marketing to the international markets.



### **PDMA, NCAI Ink MoU**

The Provincial Disaster Management Authority PDMA and the National Center of Artificial Intelligence center (NCAI) inked an MoU on 14th June,

2024 through which NCAI will provide AIoT solutions for floods and earthquakes prediction (Smart Early Warning Systems). This will not only enable data sharing between the two organizations but train the professionals on local data and give predictions on floods including their intensity and ETA. Dr. Gul Muhammad Director CISNR emphasized that the solutions will be beneficial in context of climate change mitigation, resilience and adaptation.



# Meetings of Authorities & Statutory Bodies

## CHAPTER 15

### SYNDICATE MEETINGS

131<sup>st</sup> meeting of S ndicate held on 13.06.2023 (Phase-I)

131<sup>st</sup> meeting of S ndicate held on 24 & 25 Jul , 2023 (Phase-II)

132<sup>nd</sup> meeting of S ndicate held on 19.11.2023

133<sup>rd</sup> meeting of S ndicate held on 30.03.2024

134<sup>th</sup> meeting of S ndicate held on 1.6.2024

135<sup>th</sup> meeting of S ndicate held on 23.6.2024



### SENATE MEETINGS

14<sup>th</sup> meeting of Senate held on 27.06.2024

### ACADEMIC COUNCIL MEETINGS

81<sup>st</sup> meeting of Academic Council held on 22.05.2024



### FINANCE & PLANNING COMMITTEE MEETINGS

89<sup>th</sup> meeting of F&PC held on 28.09.2023

90<sup>th</sup> meeting of F&PC held on 09.11.2023

91<sup>st</sup> meeting of F&PC held on 01.06.2024

92<sup>nd</sup> meeting of F&PC held on 23.06.2024



### BOARD OF RESEARCH AND ADVANCED STUDIES (BOASAR) MEETINGS

40<sup>th</sup> meeting of BOASAR held on 16.05.2024



# Outreach Activities

## CHAPTER 16

## Digital Outreach for Admissions 2023–24

As part of the digital outreach strategy for the 2023–24 academic session, the Directorate of Media executed focused admissions campaigns for 43 undergraduate and postgraduate programs offered in Peshawar Main Campus and satellite campuses in Jalozi, Abbottabad and Bannu Campuses. These campaigns significantly expanded the university's digital footprint, enhanced online engagement, and contributed to increased application volumes.

- Using Facebook and Instagram as primary platforms, programme offerings were effectively disseminated through targeted content including admission announcements and promotional videos. Daily posts, stories, and reels ensured a continuous visibility and engagement with prospective students.

### Key Components:

- Video Production: Developed programme-specific videos featuring faculty members, state-of-the-art labs, and alumni success stories to build credibility and connect with prospective applicants and their families.
- Digital Content Development: Designed admission-related messaging in advertisements to ensure clarity and consistency on official websites and social media platforms.
- Coordination with Teaching Departments: Maintained close coordination with academic departments for the provision of academic programmes highlights, student testimonials and other relevant content to support tailored promotional efforts.
- Through this integrated digital outreach, the Directorate of Media played a pivotal role in promoting UET Peshawar's academic offerings and reinforcing its brand presence among target audiences.

## UET Media outreach activities

An outreach activity was held at the Peshawar Model Girls High School on December 2, 2023. Dr. Shamaila Farooq, Director Media and Publications was invited as the chief guest at the Annual Fun Fair 2023. She met the students and senior faculty of PMS. During the orientation session, she informed the students and faculty about emerging technologies in the fields of AI, data science and engineering. The senior administration of PMS including Ms. Imrana and Ms. Mehwish Hamaad Director PMS also agreed for a possible outreach visit of PMS Girls School to UET Peshawar for orientation of the inspiring students for engineering education in future. Later, Dr. Shamaila extended heartfelt gratitude to the PMS management and gave away prizes to the winners of last year's Annual Fun Fair 2022.



## Skilled Trainings held under the “Pakistan Community Support Program”

The skilled training program under the Pakistan Community Support Program (PCSP) commenced at the U.S.-Pakistan Center for Advanced Studies in Energy (USPCAS-E), University of Engineering and Technology (UET) Peshawar. The program specifically targeted youth from Districts Khyber, Peshawar, and Nowshera.



The skilled training program titled, “Pakistan Community Support Program (PCSP)”, commenced on July 17th 2023 at the U.S.-Pakistan Center for Advanced Studies in Energy, UET Peshawar. Two focused training modules—Solar/Green Energy and Small Enterprise Development—were commenced to build capacity and enhance employment opportunities were held at USPCASE UET Peshawar. This initiative is part of the broader Central Asia-South Asia Electricity Transmission and Trade Project (CASA-1000), which aims to facilitate electricity trade between energy-surplus Central Asian countries and energy-deficient South Asian countries. The CASA-1000 project is aimed at building the necessary institutional frameworks and transmission infrastructure to support this regional energy exchange. As a social component of CASA-1000, participating countries—Kyrgyz Republic, Tajikistan, Afghanistan, and Pakistan have launched Community Support Projects (CSPs). These are designed to ensure local community engagement and share project benefits with the populations residing along the transmission line. In Pakistan, the CASA-1000 transmission line spans approximately 100 kilometers, traversing through District Khyber, across Peshawar, and connecting to a grid station in District Nowshera.

## Fuelling Futures Career Expo 2024

UET Peshawar participated in the first-ever national level “Fuelling Futures Career Expo 2024” on January 31, 2024 at the Pakistan China Friendship Centre, Islamabad. The UET Peshawar team comprised of CDC and students was headed by Prof. Dr. Misbah Ullah, Treasurer, UET Peshawar. The two-day Career

Expo was organized by the Ministry of Energy (Petroleum Division) in collaboration with Pakistan Petroleum Limited (PPL). The Federal Minister for Energy, Mr. Muhammad Ali inaugurated the Expo, attended by a large number of students, faculty and company representatives. The platform provided an opportunity for students to interact with the leaders of the energy and minerals industry and to learn from their experiences with the view to selecting, pursuing careers in Oil, Gas and Mineral sector.



## Training of the Trainers Program held

The ORIC UET Peshawar in partnership with the HEC hosted a groundbreaking two training of the Trainers (ToT) Program from December 11-12th 2023. The program's execution was facilitated by Invest2Innovate (i2i), a key resource organization. This ToT initiative stands as a crucial stride in propelling the domains of technology transfer and innovation within universities nationwide. Attendees of the program received immersive training and honed advanced skills in key areas such as Revenue Generation, Intellectual Property in Research, Marketing of Research and Technology Commercialization. The primary objective was to contribute to the creation of a dynamic ecosystem for technology transfer within academic institutions, fostering innovation and collaboration.

## Gems & Jewelry Center of Excellence

- ▶ 80 students have successfully completed the Diploma of Gemology
- ▶ 40 students have successfully completed the Diploma of Lapidary

# Litigation

## CHAPTER 17



## List of On-going and Decided Cases in Civil &amp; Session Court Peshawar

S.No.	TITLE OF CASE	STATUS
1	UET v/s Muhammad Tahir	On-going
2	UET v/s Muhammad Irfan	On-going
3	UET v/s Iftikhar Ahmed Khattak	On-going
4	UET v/s Samina Arif	Withdrawn
5	UET v/s Munawar Khan	On-going
6	UET v/s Naveed Aslam	On-going
7	UET v/s Dr. Imtiaz Ali Shah	On-going
8	UET v/s Muhammad Arshad	On-going
9	UET v/s Sohail Akber	On-going
10	UET v/s Engr. Sobia Iqbal	Withdrawn
11	UET v/s Qazi Raza ur rehman	On-going
12	Qazi Raza-ur-Rehman v/s UET	Decided in favour of UET
13	UET v/s M.Noman Kaka khel	On-going
14	UET v/s Engr. Talha Zahir	On-going
15	UET v/s Najaf Ali	On-going
16	UET v/s Qaiser Gul	On-going
17	UET v/s Bilal Habib	On-going
18	UET v/s Ahmed Ali	On-going
19	UETv/s Malak Umer Sharif	Withdrawn
20	UET v/s Mehmood Alam Khan	On-going
21	UET v/s Sikandar Khan	On-going
22	UET v/s Ihsan Ullah	On-going
23	UET v/s Waseem Ahmed	On-going
24	UET v/s Sheikh Imran	On-going
25	UET v/s Zia Ullah	On-going
26	UET v/s Jalal Ali	On-going
27	UET v/s Miss.Rabia Shahid	Withdrawn
28	UET v/s Nadeem Khan	Withdrawn
29	UET v/s Muzamal Arshad	On-going
30	UET v/s Imran Fazal	On-going
31	UET v/s Imran Ashraf	On-going
32	UET v/s Hamza Shakeel	On-going
33	UET v/s Awais Khawar	On-going
34	UET v/s Hasan Ali	On-going
35	UET v/s Essa Khan	On-going
36	UET v/s Shah Nasir	On-going
37	UET v/s Syed Raza Gillani	On-going
38	UET v/s Rizwan Habib	Decided in favour of UET
39	UET v/s Taimoor Gandapur	On-going
40	UET v/s Moeen-ud-din	On-going
41	UET v/s Shoaib Khan	On-going
42	UET v/s Mustafa Bari	On-going
43	UET v/s Muhammad Akbar	On-going

S.No.	TITLE OF CASE	STATUS
44	UET v/s Syed Kamran Ayub	On-going
45	UET v/s Saeed Ahmed	On-going
46	UET v/s Mustafa Kamal	On-going
47	UET v/s Ameer Sardara/Faryal Azmat	Decided in favour of UET
48	Kamran Ayub v/s UET	On-going
49	UET v/s Fariduddin	On-going
50	UET v/s Faryal Azmat	On-going
51	Imran Ashraf v/s UET	On-going
52	Imran Fazal v/s UET	Decided in favour of UET
53	UET v/s Umar Imtiaz Gillani	On-going
54	UET v/s Bilal Ahmad	On-going
55	UET v/s Taimoor Usman	On-going
56	UET v/s Bilal Farooq	On-going
57	UET v/s Naveed Ahmad	On-going
58	UET v/s Owais Muhamudi	On-going
59	UET v/s Ikram Ullah	On-going
60	Farman Ali v/s UET	Decided
61	Rustam V/s UET	Decided
62	Abid Ali V/s UET	Decided
63	UET v/s Majid Ali	Withdrawn
634	Irshad Ahmad & others v/s UET Peshawar	Decided
65	UET v/s Waleed Shahjehan	On-going
66	Inayat Ullah v/s UET Peshawar	On-going
67	Nek Muhammad v/s UET Peshawar	On-going
68	UET Peshawar v/s PESCO	On-going
69	Mst. Kishwar Sultan v/s UET Peshawar	On-going
70	Mian Inshallah v/s UET Peshawar	Decided
71	Inam Ullah v/s UET Peshawar	Decided
72	UET Peshawar v/s M. Iqbal Shabqadar	On-going
73	Abdur Rashid v/s UET Nowshera	On-going
74	Wazir Ghulam v/s IGP (UET)	Decided
75	Waqar Ahmad v/s UET	On-going
76	Muhammad Haris v/s UET	On-going
77	UET v/s Saif Ur Rehman	On-going
78	M/s Hidayat Cont v/s UET	On-going
79	PESCO Arbitration Case	On-going
80	Jalal Khan v/s UET Peshawar	On-going
81	Rambil v/s UET Peshawar	Decided
82	Syed Raza Shah v/s UET	On-going
83	Aurangzeb Khan v/s UET Peshawar (Kohat)	On-going
84	Burhan ud Din v/s Abdur Rehman	On-going
85	Mehar Rabbi v/s UET Peshawar	On-going
86	MS Abdur Rehman v/s UET Peshawar	On-going

## List of On-going and Decided in Cases High Court Peshawar

S.No.	TITLE OF CASE	CASE No.	STATUS
1	PUTA v/s UET Peshawar	W.P No.1518-P/2017	Decided
2	M. Zubair and others v/s UET Peshawar	WP NO.3584/2018	Decided
3	Ahmad Murad v/s UET Peshawar	WP NO.1163/2018	Decided
4	Muzaffar Abbas Shah v/s UET Peshawar (Abbottabad)	WP NO.327-A/2017	On-going
5	Amir Ullah Khan v/s UET Peshawar (Bannu)	W.P No. 247-B/2019	On-going
6	Dr. Muhammad Mustafa Kamal v/s UET	W. P. No.4312-P/2019	Decided
7	Sardar Ali & Others v/s UET	W. P. No.4338-P/2019	Decided
8	Muhammad Shoaib v/s UET Peshawar	W. P. No.4876-P/2019	Decided
9	Kiramat Ullah v/s V C UET & others	W.P. No.5068-P/2019	Decided
10	Raham Sher & Other v/s UET	W. P. No.5920-P/2019	Decided
11	UET v/s Samira Hayat	CR. 1164-P/2019	On-going
12	Engr. Nayyar Fazal v/s V C UET	W. P No. 2112-P/2020	Decided
13	Zakir Ullah v/s UET	W.P No.2979-P/2020	Withdrawn
14	Dr. Ikram ullah v/s Vice Chancellor UET	W.P No.144-P/2021	Decided
15	Muhammad Imran v/s UET	W.P No. 550-P/2021	Decided
16	Imran Khan v/s Vice Chancellor UET	WP No.3559-P/2021	Withdrawn
17	Lehaz Ullah Shah v/s UET	W. P No.4268-P/2021	Decided
18	Engr. Kamran Ahmad v/s VC UET	W.P No.4114-P/2021	Withdrawn
19	Dr. Nasru Minallah v/s VC UET Peshawar	W.P No.239-P/2022	Decided
20	Dr. Nasir Ahmad v/s VC UET Peshawar	W.P No.352-P/2022	Decided
21	Usman Khan & others v/s UET	W.P No.517-P/2022	Withdrawn
22	Mst. Maheen Farid v/s DA UET Peshawar	W.P No.971-P/2022	Decided
23	Akbar Farooq v/s UET Peshawar	W.P No.1721-P/2022	Decided
24	Khaleeq Ullah v/s Director Admission	W.P No.1923-P/22	Decided
25	Ilyas Shah v/s Vice Chancellor UET & others	W.P No.415-A/2022	On-going
26	Dr. Marjan Ud Din v/s UET Peshawar	WP No.3346-P/2022	On-going
27	Tayyab Jan Library Assistant v/s UET Peshawar	WP No.3196-P/2022	Decided
28	Dr. Ayaz Ahmad v/s UET Peshawar	WP No.3883-P/2022	Decided refer to Syndicate
29	Bilal Khan & others v/s Vice Chancellor UET & others	W.P No. 4259-P/2022	Decided
30	Shayan Anwar & others Vs/ Vice Chancellor UET Peshawar	WP No.4202-P/2022	Decided
31	Maqbali Khan v/s UET Peshawar	WP No.4485-P/2022	Decided
32	Arif Ullah Azhar v/s UET Peshawar	W.P No.4373-P/2022	Decided
33	Muhammad Ishaq & others v/s UET Peshawar	W.P No.4805-P/2022	On-going
34	Rahim Shah Akhunkhail v/s UET	W.P No.20-P/2023	On-going
35	Dr. Nasir Ahmad v/s UET	C.R No.903-P/2022	On-going
36	Dr. M. Inayatullah Khan v/s UET & others	W.P No.637-P/2023	On-going
37	Dr. Naeem Khan & others v/s Vice Chancellor UET & others	W.P No.262-B/2023	On-going
38	Naseeb Nawaz v/s VC UET & others	W. P No.233-B/2023	On-going

39	Javed Ahmad & Others v/s V C UET & others	W. P No.2423-P/2023	On-going
40	M/S Liaison Corporation Pvt Ltd v/s UET Peshawar	W.P No.1712-P/2023	Withdrawn
41	Abid Ullah Khan & others v/s UET Peshawar	W.P No.566-B/2023	On-going
42	Muhammad Hamayun v/s UET Peshawar	W.P No.5270-P/2023	On-going
43	Muhammad Askar v/s Dr. Iftikhar Hussain	COC No.537-P/2023	Decided
44	Daim Khan v/s Dr. Iftikhar Hussain	COC No.538-P/2023	Decided
45	Omer Imtiaz Gillani v/s UET Peshawar	W.P No. 5662-P/2023	On-going
46	UET Peshawar v/s Farman Ali	W.P No.909-P/2024	Decided
47	Dr. Irshad Ali v/s VC UET Peshawar	W.P No.907-P/2024	On-going
48	Prof. Dr. Khan Shahzada v/s UET Peshawar	W.P No. 1945-P/2024	On-going
49	Qazi Raza Ur Rehman v/s UET	CR.480/2022	On-going
50	Kimarat Ullah & others v/s Dr. Qaiser Ali	COC No.188-P /2024	Decision awaited
51	Syed Asif Ali Shah v/s Govt of Kp	W.P No.761-A /2024	On-going
52	Syed Asif Ali Shah v/s Govt of Kp	W.P No. 819-A /2024	On-going
53	Amer Taj & others v/s VC UET	W.P No.4739-P /2024	On-going (Review)
54	Shayan Anwar & others v/s Dr. Qaiser Ali VC & others	COC No.245-P/2024	Decided
55	M. Asim Shah v/s Pesco	W.P 315-B/22	On-going
56	Dr. Syed Waqar Shah v/s UET Peshawar	W.P No.336-P/2025	On-going
57	Fayyaz Ullah v/s UET Peshawar	W.P No.1107-P/2025	On-going
58	Mohy Ud Din & others v/s UET Peshawar	W.P No.1167-P/2025	On-going
59	M. Ilyas Khan & others v/s VC UET	W.P No.4741-P /2024	Decided
60	Gul Zaman v/s UET Peshawar	W.P No.5660-P/2023	Decided
61	Syed Asif Ali Shah v/s Govt of Kp	W.P No.145-A/2025	On-going

## List of On-going and Decided Cases in Supreme Court of Pakistan

S.No.	CASE NO.	TITLE OF CASE	STATUS
1	CPLA NO.2501/2018	Imtiaz Ahmad v/s UET Peshawar	On-going
2	CP-51/2016	UET v/s Arif Ullah Azhar	On-going
3	CPLA NO.185/2020	UET v/s Dr. Noor Muhammad	On-going
4	CPLA NO.2812/2019	Engr. Saima Hassan v/s UET	On-going
5	CPLA No.383/2022	UET v/s Mian Gohar Ali Shah & others	On-going
6	–	Kifayat Ullah v/s VC UET Peshawar	On-going
7	CP No.3710/2023	UET Peshawar v/s Syed Akbar Farooq	Decided refer to Syndicate
8	–	UET Peshawar v/s Muhammad Imran	On-going
9		UET Peshawar v/s Arif Ullah Azhar	On-going

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