

# ANNUAL REPORT

## 2020-21



UNIVERSITY OF  
ENGINEERING AND  
TECHNOLOGY, PESHAWAR

# CONTENTS

Message from the Chancellor .....	2
Message from the Vice Chancellor .....	3
Executive Summary .....	4
About the University.....	5
Chapter 1. University Governance .....	11
Chapter 2. Academic Activities .....	14
Chapter 3. Research and Development .....	25
Chapter 4. Innovation and Commercialization .....	67
Chapter 5. Quality Assurance .....	82
Chapter 6. University Professional Ranking .....	86
Chapter 7. Faculty Development .....	88
Chapter 8. Students Enrollment and Degrees Awarded Annually .....	94
Chapter 09. Strengthening Physical Infrastructure .....	97
Chapter 10. Strengthening Technological Infrastructure .....	101
Chapter 11. Sports .....	104
Chapter 12. Finance .....	107
Chapter 13. Funds Generation/Dvelopment .....	111
Chapter 14. University Liaison with Industry .....	113
Chapter 15. Recruitments and Promotions .....	115
Chapter. 16. Meetings of Authorities & Statutory Bodies .....	118
Chapter. 17 Outreach Activities .....	120
Chapter 18. Litigation .....	123

# Message from the Chancellor



As I appraise the activities of University of Engineering & Technology, Peshawar for the year 2020-21 as reflected in its annual report, one truth stands out that UET Peshawar has earned its place among the best universities of the country and proved to be one of the most promising institutions contributing towards national economic growth. This is evident from its performance assessed in the Times Higher Education (THE) Ranking 2022 where the University got prominence not only in the province of Khyber Pakhtunkhwa but also in Pakistan in the field of Engineering and Technology besides in General (Over All) categories in the UN Sustainable Development Goals (SDGs) 8 and 17 i.e. “Decent work and Economic Growth” and Partnership for Goals”, respectively. It is heartening to note that the University in collaboration with the government, international partners and local industry has sufficiently strengthened its research base and linkages in the relevant fields, through it need further improvement to see the real impact of its accomplishments on the betterment of respective communities.

As a Chancellor of UET Peshawar, I realize that resources for providing conducive academic facilities during Covid-19 period remained challenging; yet the management and teaching faculty of UET Peshawar was committed to provide the first-class education to the students, both physically and virtually. It was this spirit and commitment on the part of administration, management and faculty of the university which ultimately parked the University at the higher pedestal in the Times Higher Education Ranking.

No matter what challenges are there and may come ahead for UET Peshawar, its future is bright. As Chancellor, I am inspired by the morale of UET Peshawar and want to see it amongst the best of the best universities at national and international level. I hope the University's community will continue to meet the students' expectations through creativity, resourcefulness and spirit of innovation and leave good traces for the generation to come.

**Haji Ghulam Ali**  
Governor,  
Khyber Pakhtunkhwa

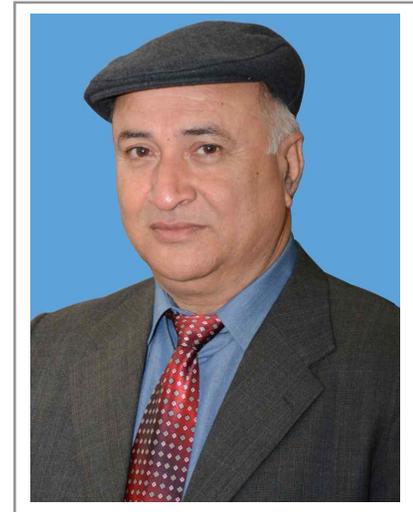
# Message from the Vice Chancellor

Dear Faculty, Staff, Alumni, and Friends of UET Peshawar, this was definitely a year filled with unanticipated events! This past year we had to divert to online instruction and administrative operations. However, it is my honor to share the diverse range of achievements undertaken by our faculty, administration and students. When you find time please peruse this report and share your feedback with us.

With more than 400 faculty Members and 200 Ph.D's from the best universities worldwide, we have conducted state-of-the-art-research in cutting edge engineering fields. Our Earthquake Engineering Center has collaborated with Government in developing the Seismic Building Code for Pakistan 2009/21 and worked jointly with the Planning & Development Department Government of Khyber Pakhtunkhwa for standardization of designs for Govt. Schools and Hospitals in KPK. Our Center of Intelligence Systems and Network Research has strengthened the Industry-academia linkages with PESCO through innovative solutions offered in form of Electrocare and Metrocare for theft detection; Similarly National Center for Robotics and Automation (NCRA) has marveled in building prototype and commercialization by doing research in development of precision agriculture, industrial automation and biomedical devices. And, our Center for Industrial & Building Energy Audits (CIBEA) which was started as HEC-TDF Project in 2018 as a Spin-off Company, helped the government in conducting Energy Audits across Pakistan. Our Center for Industrial and Building Energy Audits (CIBEA) is another success story to quote – while attaining self-sustenance, the Center has not only developed major linkages with leading agencies such as World Bank, has also started offering merit based scholarships to the talented students.

It is a matter of pride that UET Peshawar is ranked first in Khyber Pakhtunkhwa in the SDG-17, Partnerships for Goals; in Overall table. For SDG 8, "Decent work for economic growth", UET Peshawar tops in Pakistan for "Engineering and Technology" table and second in the "Overall table" in the fourth edition of the Times Higher Education (THE) Impact Ranking, 2022. THE Impact Rankings demonstrates a university's commitment to deliver the UN SDGs, make it compulsory for member universities to have SDG 17 (Partnership for the Goals), for inclusion in the "overall" table. I want to thank my team for all of their hard work in this past academic year and proving their worth. Although this is a recent report, but the activities were assessed based on our work in the year 2020-21.

I hope this year's report provides readers a glimpse into the outstanding work being undertaken by UET Peshawar.



A handwritten signature in black ink, appearing to read 'Iftikhar Hussain', with a horizontal line extending to the left and a small flourish at the end.

**Prof. Dr. Iftikhar Hussain**  
Vice Chancellor

# Executive Summary

The Annual Report 2020-21 (July 2020 to June 2021) provides updates on academics, research and finances to our stakeholders. As approved in the University Statutes, the report presents necessary facts in line with given guidelines during the reporting period. The report takes an introspective look at these areas as several milestones have been achieved in form of our concerted efforts.

It is imperative to mention that despite the impact of COVID-19 and forced change in operations this past year, teaching departments and administration across the university were able to collaborate and effectively to achieve targets including sticking to the academic calendar, holding online admissions and holding statutory meetings well on time. UET Peshawar swiftly transformed its teaching to digital mode and carried online classes for Undergraduate and Postgraduate programs without any interruption during these times as well. This transformation also helped us to think out-of-the-box and perform administrative functions through online services as well. As many as two meetings of Senate, seven meetings of Syndicate, two meetings of Finance & Planning Committee, and one meeting of the Academic Council also took place to regulate the university affairs during the reporting period.



The UET Peshawar has deepened its engagement with Government departments, local industry and International partners to achieve its strategic vision. Of those included MoUs with NESPAK, Foster Learning, SNGPL, Planning and Development (P&D) Department, Khyber Pakhtunkhwa, Xypher Technologies, Islamabad, UNHCR & Afghan Commisionerate, Ministry of SAFRON and UNHCR RAHA, Agriculture University Peshawar and KPEZDMC. The purpose of these linkages was to build sustainable support for the university and create internship and exchange opportunities for the students and faculty. In addition, more than 500 research publications were published by our faculty.

This past year we also focused towards generating more funds through different sources. Knowing the financial crisis that the Higher Education sector is facing, we are satisfied on reaching out to local industry for consultancy services and generated around Rs. 30.5 million while Rs. 8.49 million from our endowment fund. Our research grant portfolio stands at Rs. 460.96 million. These research grants are funded by both HEC and other national agencies. During the reporting period 161 appointments and promotions of faculty and staff were made in different sections through a fair and standard process of selection.

I would like to thank the Vice Chancellor Prof. Dr. Iftikhar Hussain for continuously providing leadership and guiding us through challenging times. As we enter into next year, I ensure that we are ready to deliver an exciting agenda over the next twelve months.

A handwritten signature in black ink, appearing to read 'K. Azam Khan'.

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

University of Engineering and Technology, Peshawar, is a premier institution of higher learning in the field of engineering sciences. Starting as a College in 1952, with an initial enrollment of only twenty students, today it boasts twenty two engineering departments, covering an entire spectrum of engineering disciplines, from the traditional, such as electrical and mechanical, to the cutting-edge technologies such as electronics, mechatronics, and industrial engineering. To-date, thousands of students that graduated are serving the needs of Pakistan, and many have achieved high positions of responsibility and excellence in their chosen fields.

Besides bachelors degree courses, there is a robust post-graduate program, where scholars are engaged in rigorous training and research leading to Master's and Ph.D degrees. UET also has a strong out-reach program, under which academic linkages with the world class universities of UK, Canada, USA, Malaysia, Italy and Thailand offering invaluable training to faculty and students, through split programs, joint research and faculty exchanges.

Over the last few years, with Higher Education Commission's support, UET had initiated a number of research and infrastructure development projects, with a portfolio of Rs. 9 billion. Major projects include "Earthquake Engineering Center", serving as a hub of applied research in South Asia, "Department of Mechatronics Engineering", "National Institute of Urban Infrastructure Planning" and "Gems and Jewellery Center of Excellence".

In order to increase access to engineering education, particularly for the people of Khyber Pakhtunkhwa, UET has been awarded a "mega" project of Rs. 6.56 billion to develop a new campus called, "Establishment of Jalozai Campus." The Jalozai Campus promises to push boundaries for engineering education and will double its student intake from 4000 to 8000. With this, our Mardan Campus has now been transformed into an independent university. This marks a great success of our programs and quality education being offered at the doorsteps of Khyber Pakhtunkhwa.

## Peshawar Campus

With a modest beginning in 1952 as a "constituent" college of Peshawar University, UET, Peshawar was established in 1980. Since then, five satellite campuses in Mardan, Bannu, Abbottabad, Kohat and Jalozai have been added. We have also established centers of excellence and institutions. However, Peshawar Campus remains the nucleus of the University, keeping everything moving along the correct path.

Located in the historic city of Peshawar, UET is a reflection of the surrounding environment. While the ambiance on campus is predominantly academic, there is a strong cultural flavor, easily discernable in every facet of its activities. Our unique cultural diversity is readily recognizable. There are many disciplines at Peshawar for students to choose from. These are supported by well-equipped laboratories, departmental research, and a central library, sports facilities and enough dormitory accommodation to house most students that need campus housing. There are four faculties created to administered the performance of respective departments.



# About the University

## Satellite Campuses

### Abbottabad Campus

The Chancellor, UET, Peshawar inaugurated Abbottabad Campus in October, 2002, in the old premises of Ayub Medical College. The city of Abbottabad gained fame as a city of schools and colleges. Due to a pleasant climate, people from all parts of the country send their children to study in reputed educational institutions such as Army Burn Hall, Abbottabad Public School, COMSATS Institute of Information Technology etc. In addition, five medical colleges in the city also attract students. 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. A new girls hostel with a capacity to accommodate hundred students has been constructed at the 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, two traditional disciplines in engineering sciences are offered, and efforts are afoot to consolidate these programmes. Large investment in strengthening laboratories, and upgrading infrastructure are being done to quickly bring this campus at par with others.

### Kohat Campus

The administrative and management control of Engineering Academic Programmes of Kohat University of Science and Technology (KUST) was handed over to UET, Peshawar on April 3, 2012. At present, UET Kohat Campus is offering B.Sc. electrical engineering in leased premises, providing all necessary facilities to the students.

### Jalozai Campus

The Jalozai Campus funded by HEC at the cost of Rs. 6,565.272 Million is being established on Pabbi-Cherat Road at 11 KM Southwards from GT Road in district Nowshera. Total area of the campus is 402 acres and the total covered area is approximately 1,021,233 sq. ft. with live-in strength of 3,240 students in eight departments. The Campus includes academic blocks, central facilities, amenities, sports & recreational facilities, hostels, staff residences together with infrastructural facilities and a Sewage Treatment Plant.



Having the services of all Ph.D faculty Jalozai Campus will offer education in eight engineering disciplines including Civil Engineering, Electrical Engineering, Mechanical Engineering, Telecommunication Engineering, Computer Science and Information Technology, Chemical Engineering, Petroleum and Gas Engineering and Industrial Engineering out of which four undergraduate programmes i.e civil engineering, electrical engineering, mechanical engineering and industrial engineering have been started.

## Centers Of Excellence & Skill Development Centers

### 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. Currently, NIUIP is having 124 M.Sc. students enrolled in both the streams. In the year 2015, the institute also initiated its PhD program and currently thirteen (13) numbers of students are currently pursuing their PhD at NIUIP.

### Continuing Engineering Education Center (CEEC)

CEEC ensures need-based trainings to the engineering community as a part of continuing engineering education to in-serve 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.



## Centers of Excellence

- 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.

### 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.

### Quality Enhancement Cell (QEC)

The Quality Enhancement Cell (QEC), is aimed to assist the university in improving the student learning by continuously enhancing and maintaining the academic standards under the HEC guidelines. At present, the QEC efforts are mainly focused on coordination between the university and HEC, and implementation of the HEC quality assessment procedures. Since its establishment in February 2007, QEC has focused on gathering information and data about the facilities, finances, research, students, and faculty of each department and, has incorporated the collected information in the HEC ranking performance as per HEC requirements.

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

UET Peshawar has developed the Office of Research Innovation & Commercialization (ORIC). This office is aimed at transforming pure knowledge into products and

services with the perspective of ultimate 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.

### **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**

National Centre for Cyber Security (NCCS) shall play a leading role in securing Pakistan's Cyberspace and making Pakistan world's premier nation in Cyber Security.

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

The Center of Intelligence Systems and Network Research (CSINR) was launched at Electrical Engineering Department. The Center presents an example of industry-academia linkage, established with the active participation of faculty of Electrical Engineering Department.

### **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

## Centers of Excellence & Affiliated Engineering Colleges

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 Chancello, 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

Besides offering a robust engineering program at undergraduate and postgraduate ranging from conventional disciplines such as agricultural, civil and mechanical engineering to state-of-the-art programs are being offered in mechatronics, computer software and computer systems engineering.

### Undergraduate Engineering Programs

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

### Undergraduate Non-Engineering Programs

- B.Sc Computer Science & Information Technology (Pesh)
- B.Sc Computer Science & Information Technology (Jalozai)
- B.Sc 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 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

# Academic Activities

## Faculties

There are four faculties created to administered the performance of respective departments.

### Faculty of Electrical & Computer Engineering

- Department of Electrical Engineering, Peshawar
- Department of Electrical Engineering, Bannu Campus
- Department of Electrical Engineering, Jalozei Campus
- Department of Electrical Engineering, Kohat Campus
- Department of Computer Systems Engineering, Peshawar Campus
- Department of Electronic Engineering, Abbottabad Campus
- Department of Computer Science & IT, Peshawar Campus
- Department of Computer Science & IT, Jalozei Campus

### Faculty of Mechanical, Chemical & Industrial Engineering

- Department of Mechanical Engineering, Peshawar Campus
- Department of Mechanical Engineering, Jalozei Campus
- Department of Industrial Engineering, Peshawar Campus
- Department of Industrial Engineering, Jalozei 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, Jalozei 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 mandated to identify and explore areas of cooperation and linkages with foreign and local institutions. Promoting academic collaboration with local and foreign universities in the form of student, faculty and student exchange, joint research, exchange of publications, sponsorship of conference and other academic activities is the main portfolio where we are actively involved in the initiation, planning, implementation and monitoring of linkage activities.



## FOREIGN ACADEMIC LINKAGES

University of Illinois, USA  
 University of Maryland , USA  
 George Washington University, USA  
 Mississippi State University, USA  
 Old Dominion University, USA  
 George Mason University Virginia, USA  
 McGill University, Canada

University of British Columbia, Canada  
 Cambridge University, UK  
 Loughborough University, UK  
 Southampton University, UK  
 University of Glasgow, UK  
 University of Strathclyde, UK  
 University of Surrey, UK  
 American Board for Certification of Teacher Excellence (ABCTE)

University of Bradford, UK  
 Politecnico Di Torino, Italy  
 Rose School University of Pavia, Italy  
 AIT Bangkok, Thailand  
 Shandong Academy of Sciences, China  
 Tsinghua University, China  
 Keele University, UK  
 Pro-Quest

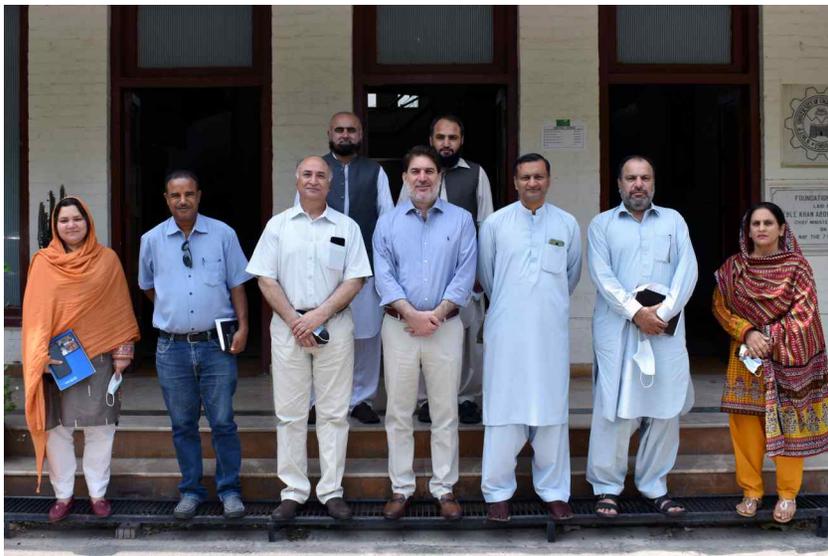
# Academic Activities

## Institutional Linkages/MoUs

S.No	Name of Organization	Purpose of MoU
1.	<b>Planning and Development (P&amp;D) Department, Khyber Pakhtunkhwa</b>	<p>UET Peshawar and the Planning and Development Department (P&amp;DD), Khyber Pakhtunkhwa signed a Memorandum of Understanding on October 03, 2020. The objective of MOU is to extend cooperation between the both institutions in the fields of IT, information sharing, monitoring and compliance level of different departments within the policy framework. The Secretary, Planning &amp; Development Mr. Hamayun Khan and Pro-Vice Chancellor UET Prof. Dr. Qaiser Ali signed the MOU. The signing ceremony also witnessed the award of a project funded by the Governance and Policy Project of the World Bank to UET Peshawar on "Integration and standardization of Management Information Systems for Effective Public Investment Management".</p> <p>Former Secretary P&amp;D KP Mr. Hamayun Khan said that P&amp;D department under the vision of the provincial government intended to introduce standardization of management information systems for effective public investment management to utilize the public money in more transparent, efficient and intelligent manner with utmost target of people's prosperity and improvements in lives. He added that (MOU) is considered as the first step in the process of developing an agreement that enables the P&amp;D department to get benefit from the expertise of the Scholars of UET Peshawar. Prof Dr. Qaisar Ali said, Pro-VC UET having a huge foreign qualified human resource is committed to work with Government and industry under the guidelines of HEC and PEC.</p>
2.	<b>Xypher Technologies, Islamabad</b>	<p>The Advanced Robotics and Automation Lab (ARAL), UET Peshawar and the Xypher Technologies, Islamabad signed a MoU on April 08 2021 to collaborate in the fields of Smart Agriculture and Artificial Intelligence (AI). The MoU was signed by Prof. Dr. Tahir Khan, Director National Center in Robotics and Automation and Mr. Faisal Yaseen, CEO Xypher Technologies, Islamabad in the presence of Prof. Dr. Iftikhar Hussain, Vice Chancellor UET Peshawar and senior officials.</p> <p>The ARAL and Xypher will work together in the fields of smart agriculture and precision farming by applying AI. Mr. Faisal Yaseen, CEO Xypher Technologies said that Xypher Technologies has already produced a first of its kind product, Block TrEx which is a food traceability application relevant for food value chain industry.</p>
3.	<b>UNHCR &amp; Afghan Commisionerate</b>	<p>UET Peshawar, Commisionerate of Afghan Refugees and UNHCR signed the framework of Cooperation on February 03, 2021. Prof. Dr. Iftikhar Hussain VC UET Peshawar and Mr. Bernard Inkoom UNHCR Sub Office Peshawar signed the framework in presence of Mr. Abbass Khan Commissioner Afghan Refugees and senior officials of UET Peshawar. The framework is aimed to facilitate the access to academic programs and professional training courses for Afghan refugees from basic to advanced level trainings.</p>

4.	<b>Ministry of SAFRON and UNHCR RAHA</b>	<p>UET Peshawar and the Ministry of SAFRON and UNHCR RAHA (Refugee-Affected and Hosting Areas) Program will work jointly for the development and capacity building of Afghan refugees students enrolled at UET Peshawar. In a high-level meeting held on May 04, 2021, the discussion was also held on matters of mutual interest including the PC-1 submitted in the context of a MoU signed earlier between UET Peshawar and UNHCR to renovate and rehabilitate the infrastructure of major engineering departments and laboratories; to increase access for the Afghan refugees to UET's academic programs and design vocational training courses for enrolled Afghan refugees.</p> <p>Mr. Shaferaw, Program Officer UNHCR said UET Peshawar as a public sector university has enrolled a significant number of Afghan refugee students at its Undergraduate engineering programs that will help them get quality education as well as develop their skills. Prof. Dr. Iftikhar Hussain, Vice Chancellor UET Peshawar appreciated the UNHCR team for joint collaboration and agreed to look into the possibilities for outreach programs and considering the request for a discount in tuition fees for Afghan refugees under its self-finance programs.</p>
5.	<b>Agriculture University Peshawar</b>	<p>UET Peshawar and the University of Agriculture, Peshawar inked a Memorandum of Understanding on February 11, 2021. The objective of MoU was to work together for mutual benefits in the field of "Artificial Intelligence intervention in Smart Environment and its impact on human and crop health and other fields in future". The MoU was signed by Dr. Gul Muhammad, Director National Center for Artificial Intelligence (NCAI) and Dr. Anwar Ali Shad, Chairman Agriculture Chemistry Department, Agriculture University, Peshawar.</p> <p>Prof. Dr. Iftikhar Hussain said that UET Peshawar aim is to provide intelligent and sustainable solutions in smart environment, sustainable agriculture and resilient communities. He further added that our agreement with Agriculture University is aligns with our objectives, as together, we can make the agriculture sector more sustainable by using Artificial Intelligence (AI), and Artificial Agriculture which will help agriculture sector to increase production, reduce costs and improve returns.</p> <p>Prof. Dr. Said Wahab, Pro-VC Agriculture University said that this venture will help us collaborate in the direction to cope with climate change, food security, malnutrition and agriculture development through AI.</p>
8.	<b>NAVTTTC Government of Pakistan</b>	20.05.2021
7.	<b>NAVTTTC Government of Pakistan</b>	03.05.2021
8.	<b>NESPAK Pvt Ltd</b>	20.04.2021
9.	<b>Pro-Quest</b>	20.1.2021
10.	<b>KPEZDMC</b>	03.11.2020
11.	<b>Rainmakers</b>	22.09.2020
12.	<b>American Board for Certification of Teacher Excellence (ABCTE)</b>	09.09.2020

# Academic Activities



## University Events

### ETEA Engineering Entrance Test 2020

Entrance Test for Academic Session 2020 was successfully conducted on 27th September, 2020 simultaneously at Peshawar, Mardan, Abbottabad, Swat, Malakand, Kohat, and D.I. Khan Centers. The test was conducted by the Educational Testing and Evaluating Agency (ETEA) of Government of Khyber Pakhtunkhwa. Around 7,000 candidates from Khyber Pakhtunkhwa, erstwhile FATA, AJK and Gilgit Baltistan appeared for the entrance test.



Special Assistant to Chief Minister for Higher Education and Information, Kamran Bangash visited the Center while Mr. Dawood Khan, Secretary Higher Education, was also present on the occasion. He was briefed about the salient features of the test and SOP's by UET Peshawar Officials. He lauded the efforts of UET Peshawar and ETEA for successfully holding Entrance Test at a mega scale in seven centers without any interruption, and said that it was one of the priority areas of the government to ensure merit at universities.

The Pro-Vice Chancellor, University of Engineering and Technology, Peshawar Prof. Dr. Qaisar Ali said UET Peshawar strictly followed the Provincial Govt's guidelines for Covid-19 and conducted the entrance test in open air. He said, all measures including social distance was maintained while face masks and sanitizers were given to the candidates free of cost. The same practice was followed at all centers in Peshawar, Kohat, Bannu, Mardan, Abbottabad, Swat and D.I.Khan. He thanked the Higher Education Department for assuring full cooperation under the supervision of Secretary Higher Education, Mr. Dawood Khan. He also appreciated the efforts of Dr. Rashid Nawaz, Director Admissions for the successful execution of the test.

At Peshawar Center, a total of 2319 candidates appeared in the test for admission in engineering disciplines, similarly at Abbottabad Center 1327 candidates, at Swat Centre 509 candidates, at Mardan Center 1045 candidates, at Kohat Center 711 candidates, at Malakand Center 463 candidates, while at D.I. Khan Center 652 candidates appeared in the test. Altogether, 6544 male and 482 female candidates appeared in all centers.

### Russian Delegation Visits UET Peshawar

A Russian delegation led by the Andrey G. Fesyun, Consul Director, Consulate General of the Russian Federation met Pro-Vice Chancellor, on August 25th, 2020 to discuss mutual areas of interest in the field of research and academics. The aim of the visit was to look out for possibilities for joint student exchange programs through scholarship programs for studying in Russian Universities and UET Peshawar. To carry out the same, the delegation visited the Centers of Excellence and attended the presentation from faculty for joint collaborations in future. The delegation comprised of Mr. Arsallah Khan Honorary Counsel Russian Federation came up with various opportunities for UET



# Academic Activities

students and faculty in Russia and vice versa. Mr. Andrey G. Fesyun stressed that the Russian Government is paying significant attention to the development of Science and Technology between the both countries. He said, such ventures would jointly would contribute to extend students exchange scope and strengthen the ties between the people of both countries.

Prof. Dr. Qaiser Ali expressed interest to initiate the growth of new opportunities for engineering students and faculty of both the countries. He said, a faculty exchange program could be initiated after the mutual agreement is sought from both the parties.

## Team of HEC Visited Jalozai Campus

A team of Higher Education Commission (HEC) visited the UET Jalozai Campus on 10th September, 2020. The visit was aimed to check and review the performance of Jalozai project. The team visited various on-going infrastructure works, laboratories and academic departments. The delegation expressed their satisfaction on overall performance of Jalozai Campus. The team advised proposals to improve the performance of the project. Meanwhile, Prof. Dr. Qaiser Ali, welcomed the delegation and briefed them over the performance of Jalozai Campus. On the occasion, Prof. Dr. Shahid Maqsood, Coordinator, Jalozai Campus, Prof. Dr. Bashir Alam, Director P&D, Mr. Amir Imam, PD Jalozai Campus, senior UET and HEC officials were also present.

## Student Facilitation Centers Set-up at Mechanical and Electrical Engineering Departments

The Department of Mechanical and Electrical Engineering have set-up the Students Facilitation Centers to facilitate the students under one window operation. The Pro-Vice Chancellor Prof Dr. Qaiser Ali inaugurated the Centers on 5th November, 2020 and 3rd December, 2020 respectively.

Prof. Dr. Qasir Ali said, universities are established to facilitate the students and if there is no enough support for the students they would have no purpose to exist. He said, similarly SFCs will be established in all major departments through University resources. The Pro-Vice-Chancellor assured to extend financial support to the teaching departments. "For this purpose, three PC-1s have been submitted to the Afghan Commensurate for strengthening of infrastructures of major engineering departments. This will give a new look to the University, hence improve the standards.

Prof. Dr. Naeem Khattak, Chairman Mechanical Engineering Department said, the SFC is aimed to resolve issues faced by the students related to admissions, academ-



ics, examinations, and accounts by one window operation. He said since, UET Peshawar has already adopted the Outcome-Based System; the Student Satisfaction Index is the main yardstick through which our university is to be ranked worldwide. "We at MED are proud to launch the state-of-the-art facility for ensuring excellence in the student satisfaction index", he remarked. He thanked the Directorate of Works and allied staff for completing the civil works of SFC in a mini time period of three weeks. Prof. Dr. Syed Waqar Shah, Chairman, Department of Electrical Engineering, thanked the Pro Vice Chancellor, Prof. Dr. Qaiser Ali for his full support for the rest of the work in the Department of Electrical Engineering apart from the "Student Facilities Center". He said that the purpose of setting up this center was to solve the problems faced by the students related to admissions, education, examinations and accounts under one roof. Prof. Dr. Iftikhar Hussain, former Vice Chancellor, Prof. Dr. Akhtar Naeem Khan, Dean, Faculty of Civil Engineering, Prof. Dr. MA Irfan, Dean, Faculty of Mechanical, Prof. Dr. Amjad Ullah, Dean, Faculty of Electrical, Prof. Dr. Siraj-ul-Islam, Dean, Faculty of Allied Sciences, Prof. Dr. Hameedullah, Director Undergraduate Studies, Prof. Dr. Misbahullah, Treasurer, Muhammad Haroon Khan, Registrar, Dr. Khizar Azam, former Registrar, senior faculty members and administrative officers were also present on the occasion.

### **New office for the "Directorate of Postgraduate Studies" Inaugurated**

A new office for the Directorate of Postgraduate Studies was inaugurated at the Malik Saad Shaheed Building, UET Peshawar on 18th November, 2020 by the Pro-Vice Chancellor. On the occasion, Pro-Vice Chancellor said that despite the unavoidable circumstances like Covid-19, the University is opening various centers for the convenience of the students such as "Student Facilitation Centers" in various departments and the center inaugurated today aims to facilitate postgraduate students. The credit for this new office goes to the Director Postgraduate Studies, Prof. Dr. Khan Shahzada and his team. He said that at present we have more than 3,000 masters and 700 Ph.D students who are being provided facilities through this directorate to complete their education and research, master's and PhD studies.



He appreciated the efforts of Dr. Gulzar Ahmad, Director, Students Affairs, Miss Farhkhand Suleman Additional Director Accounts, Mr. Shah Tamas, Deputy Director Scholarships, Mr. Yaseen Khan, Establishment Officer and other officials.

### **The accreditation team of National Computing Education Accreditation Council (NCEAC) Visits CS&IT Department**

The accreditation team of National Computing Education Accreditation Council (NCEAC) led by Prof. Dr. Shoab A Khan (Vice Chairman NCEAC) and Prof. Dr. Hanif Durad successfully conducted the re-accreditation visit of the BS Computer Science program of the Department of Computer Science and Information Technology (CS & IT), UET Peshawar. Prof. Dr. Amjad Ullah Khattak (Dean, Faculty of Electrical and Computer Engineering), Dr. Sadeeq Jan (HoD, Department of CS & IT), Dr. Iftikhar Ahmad (Director, QEC) and other faculty members of the department were present at the occasion.

### **A Progress review meeting of the affiliated colleges**

A Progress review meeting of the affiliated colleges was held on March 12, 2021. The meeting was chaired by the Senior Dean, Prof. Dr. M.A. Irfan and attended by the senior officials of Government Colleges of Technology (GCTs) offering B.Tech programs affiliated with UET Peshawar. Prof. Dr. Amjad Ullah Khattak, Dean Electrical and Computer Engineering, Director QEC, Controller of Examinations, and TEVTA officials were also present on the occasion.

# Academic Activities

Progress on CQI cycle for affiliated colleges was presented by each Principal of the affiliated colleges and appreciated by the Deans. It was emphasized that the continuous quality improvement cycle of 3 years could be best achieved through collaboration between GCTs, TEVTA, and UET Peshawar. It was decided that affiliated colleges would also get accredited from NTC in 2021-22.

## Cheque Distribution Ceremony “Ihsas Undergraduate Scholarship Program” Held

UET Peshawar arranged cheque distribution ceremonies for the “Ihsas Undergraduate Scholarships Program” on June 09, 2021 and August 06, 2021 respectively. At present, 604 scholarships have been awarded to the deserving students under the Prime Minister’s “Ihsas Undergraduate Scholarships program”. The Vice Chancellor Prof. Dr. Iftikhar Hussain gave away the scholarships in presence of senior faculty. He urged the recipients to work hard and get full benefit from the scholarships.



# Research & Development

## CHAPTER 3

## Outcome of University Research Activities

### Department of Civil Engineering

S.No.	Title of Project (Principal Investigator)	Outcome (Expected Benefits to Society)
4	<p>Seismic Capacity Assessment of Textile Fiber Reinforced Infill Walls in Reinforced Concrete Structure</p> <p>PI: Dr. Khan Shahzada Co-PI: Dr. Hafsa Jamshai (HEC) <b>Funded by:</b> (HEC-NRPU), Rs. 6.10 M)</p>	A step towards affordable and sustainable housing

### Department of Mechanical Engineering

S.No.	Title of Project (Principal Investigator)	Outcome (Expected Benefits to Society)
1.	<p>Ultra High Molecular Weight Polyethylene with Rigid Reinforced Structures for use in Artificial Joint Application</p> <p>PI: Dr. Rizwan M. Gul <b>Funded by:</b> Joint Research Project (Pakistan Science Foundation-PSF and National Natural Science Foundation, China-NSFC), Rs. 3.7 million</p>	<p>Conducting 3 years duration sponsored research project on "Ultra High Molecular Weight Polyethylene with Rigid Reinforced Structures for Use in Artificial Joint Application". This project aims to design and fabricate high-performance ultra-high molecular weight UHMWPE implants with rigid reinforced framework for the joint application. The melt processable UHMWPE material will be prepared by compounding a small amount (~ 5.0 wt%) of LMWPE with the UHMWPE. During the injection molding, intense shear flow in combination with pressure will be applied to induce high-content, large-size shish-kebabs of LMWPE to construct the rigid framework. Either bulk crosslinking or surface crosslinking will be performed via peroxide diffusion. The highly surface cross-linked UHMWPE with rigid framework will simultaneously improve the wear resistance and mechanical performance.</p>

2.	<p>Personalized Cooling Vest Using Phase Change Materials</p> <p>PI: Dr. Rizwan M. Gul  <b>Funded by:</b> Higher Education Research Endowment Fund Research Grant, Higher Education Department, Government of KPK  Rs. 2.5 million</p>	<p>Conducting sponsored research projecton “Personalized Cooling Vest Using Phase Change Materials”. The project involves identification of a suitable phase change material for cooling vest. Improving the thermo-physical properties of phase change materials using carbonnanoparticles and making a cooling vest for commercialization in KPK and Pakistan.</p>
3.	<p>Friction and Wear Studies of Modified Ultra-high Molecular Weight Polyethylene for Use in Total Joint Replacements</p> <p>PI: Dr. Rizwan M. Gul  <b>Funded by:</b> Agency: Pak-Turk Researchers' Mobility Grant Program, Higher Education Commission (HEC), Pakistan  Rs. 2.6 million</p>	<p>Awarded research mobility travel grant under Pak-Turk Researchers' Mobility Grant Program funded by HEC. In the project UHMWPE mixed low molecular weight polyethylene will be processed by injection molding followed by bulk or surface crosslinking. Surface crosslinking will be achieved by diffusion. Different doping time and temperature will be applied to observe the diffusion kinetics such as diffusion rate and diffusion depth. This is followed by using a multi-stage pin-on-disc tester to measure the wear of UHMWPE, in which the UHMWPE pins will be immersed in the bovine serum. The wear surface of the pins will be observed by optical microscopy and scanning electron microscopy to reveal abrasion.</p>

## Center for Advanced Studies in Energy

S.No.	Title of Project	Fund Granted
1.	Investigating factors affecting socio-technical integration of Micro-Hydro Power projects in Khyber Pakhtunkhwa, Pakistan", Joint research project between University of Cambridge and UET Peshawar.	6700 GBP
2.	Clean cooking and electricity through E-Stove in Pakistan", Joint research project between Keele University, UK, University of the Punjab and UET Peshawar funded by British Council.	6300 GBP
3.	Condition Monitoring and Predictive Maintenance of Fighter Aircraft Hydraulic System Using Machine Learning Algorithms", Project Funded by Higher Education Commission.	13.228 million PKR
4.	UNIDO Energy Management System Implementation in KP and Baluchistan provinces of Pakistan", Project Funded by UNIDO.	50000 USD

## Department of Electrical Engineering

S.No.	Title of Project (Principal Investigator)	Outcome (Expected Benefits to Society)
1.	Road safety and disaster management / protection on CPEC Route <b>PI: Dr. Gul Muhammad Khan</b>	The project is approved by HED Khyber Pakhtunkhwa and is in progress. It is aim at Implementation of technological solution to curb nature / manmade disasters; the potential outcome is disaster protection on CPEC Route.
2.	Project Title: "Design and Development of Open National Seismic Catalog and Intelligent Earthquake Detection/Prediction System". RS. 14.6556 Million <b>PI: Dr. Gul Muhammad Khan</b>	
3.	Project Title: "Water Supply Management System using Wireless SCADA for Public Health Swat" <b>Funded by:</b> Public Health Swat Rs. 0.8 Million <b>PI: Dr. Gul Muhammad Khan</b>	
4.	Project Title: "Disaster Management using AI: Smart Disaster Management, Early Stage Prediction and Impact Analysis of Flood, Earthquake and Landslides" <b>Funded by:</b> Planning Commission of Pakistan through HEC Rs. 170 Million <b>PI: Dr. Gul Muhammad Khan</b>	
5.	Project Title: "Safe City Management (Autonomous Events: Threat, Accident, Malicious Activities)" <b>Funded by:</b> Planning Commission of Pakistan through HEC Rs. 170 Million <b>PI: Dr. Gul Muhammad Khan</b>	
6.	Project Title: "Smart Environment: Impact Analysis and Prediction of Pollution on Animal and Plants" <b>Funded by:</b> Planning Commission of Pakistan through HEC Rs. 170 Million <b>PI: Dr. Gul Muhammad Khan</b>	

## Department of Computer Systems Engineering

S.No.	Title of Project (Principal Investigator)	Outcome (Expected Benefits to Society)
1.	Machine-to-Machine Communication with Mobile Networks for Economic Stability and Peace  PI: Dr. Safdar Nawaz Khan Marwat	The project is based on the requirements of a mega-project, the CPEC, and the focus of this project is to facilitate deployment of latest logistic related technology for remote monitoring of perishable goods during transportation. This project has resulted in establishment of research partnership with University of Lorraine, France which has enabled researchers from UET Peshawar to observe the highly advanced logistics and communication networking industries of France. Research travel grants for visits to France by young researchers from Pakistan has given them opportunity to work in state-of-the-art environments and comprehend the “dynamics in logistics”.
2.	Secured IoT Devices Lab  PI: Dr. Salman Ahmad	This lab would enable the deployment of cutting-edge scientific concepts and IoT based devices for the attainment of various economic and developmental goals. The utilization of IoT devices for monitoring of goods during conveyance is of paramount importance for ensuring the delivery of articles in good shape. Such kind of data is related to the condition, location, quantity and value of goods. However, such type of remote monitoring systems not only possess communication and mobile networking challenges, but also the protection of this immensely valuable data is a very complicated task. This process of achieving secure IoT communications requires acquaintance with the peculiarities of IoT based communication as well as an awareness of the innovative features of mobile networks along with careful design of the system.
3.	Employing 'IoT' technology to automate and secure the registration process of container trucks.  PI: Dr. Bilal Habib	Hundreds of trucks carrying important trade items cross the international Pak-Afghan border at Torkham and Chaman on daily basis. These trucks provide the lifeline for the trade between Pakistan and Afghanistan. Currently each truck is stopped at the border for registration, identification and authentication purposes. This process is done in manual and archaic methods. It results into slowing down the trade: sometimes trucks wait for days for processing and paper work. We propose to install a system of secure sensors and scanners. We will bring down the time to register a truck; from days to under 1 min. It will make the trade more efficient and significantly reduce the costs like fuel, truck parking, driver salaries and manual labor. Smuggling and illegal trade will be checked and addressed by incorporating smart locks and digital signatures. Industries will get direct benefit if smuggling is tackled. It will ensure job creation at national and regional level. By removing the manual registration, we make the system free of commissions and red-tapism. It will result into more money collected for national kitty. By securing the system, military and sensitive agencies can get a direct benefit for ensuring the national security.
4.	A more reliable solar system for residential and commercial application  PI: Dr. Tariq Kamal	The current solar energy systems suffer from lower efficiency and reliability. We are designing a system that improves the overall efficiency of the current solar energy system. The resultant system will be more safe, cost-effective, reliable and efficient. Improving the efficiency of the system will make the technology cheaper, thus allowing small and medium enterprises and residential consumers to get electricity at much affordable rates. Our work will also benefit people in the remote areas where usually there is no access to the national grids, or the voltage is very low.

## Department of Computer Systems Engineering

S.No.	Title of Project (Principal Investigator)	Outcome (Expected Benefits to Society)
1.	<p>Establishment of Multimedia streaming and analytics R&amp;D Lab</p> <p>PI: Dr. NasruMinallah <b>Funded by:</b> HEC</p>	<p>This project is funded by HEC as part of National Center for Big Data and Cloud Computing. The objective of this R&amp;D activity is to develop a cloud computing based P2P live and on-demand multimedia streaming application and to conduct research in the same field.</p> <p>The recent convergence of the communication and computing industries has resulted in the development of various consumer electronic devices, such as smart phones, smart TVs, gaming consoles and tablets. With the emergence of these new generations of devices, video playback and its quality has become key driving factor leading to their development. The transformation of these devices with various functions, such as video conferencing, video gaming, social networking and video continent distribution has resulted in the creation of heterogeneous networking environment, where different users use different type of devices to communicate with each other.</p> <p>Our goal is to design and develop an advanced live multimedia streaming system, with support of scalability feature to work effectively in diverse networking conditions and provision of high user quality of experience with increase in number of users, with effective utilization of cloud computing, storage and analytics resource for multimedia streaming.</p>
2.	<p>Establishment of Remote sensing big data analytics and computing R&amp;D Lab</p> <p>PI: Dr. Nasru Minallah <b>Funded by:</b> HEC</p>	<p>This project is funded by HEC as part of National Center for Big Data and Cloud Computing. The objective of this R&amp;D activity is to develop a cloud computing based land-use and change detection system using remote sensing to assist Planning Agencies, Government organizations, environment monitoring agencies, individuals and organizations, to effectively obtain land-use and change detection statistics for planning and monitoring of the land surface and environment. A Remote Sensing system will be developed that will effective utilization cloud's storage, computing and analytics resource for land-cover use and change detection.</p>
3.	<p>Establishment of Traffic characterization and analyticsR&amp;D Lab</p> <p>PI: Dr. Nasru Minallah <b>Funded by:</b> HEC</p>	<p>This project is funded by HEC as part of National Center for Big Data and Cloud Computing. Vehicular traffic flow being a dynamic system, experiences perturbation because of new entrant vehicles at ingress. Causing shock waves which travels back in the traffic flow system causing congestions. Congestion, excessive acceleration and deceleration increases fuel consumption, emissions (CO<sub>2</sub>, CO, dust particles etc.) and accident's vulnerability. Traffic flow models will be devised using Wave propagation, Fluid Flow dynamics, Constraint/linear programming, Queuing theory and regression techniques for forecasting, congestion mitigation and ameliorating traffic flow. A working simulator for traffic flow characterization and analytics will be developed that will support of real time route choice to the drivers by integrating real time data (congestion, pollution, and traffic flow) and make decisions for real time traffic.</p>

4.	<p>Establishment of Cloud Integration and analytics for mass data platform R&amp;D Lab</p> <p>PI: Dr. Nasru Minallah <b>Funded by:</b> HEC</p>	<p>This project is funded by HEC as part of National Center for Big Data and Cloud Computing. Gathering of digital data and computing analytics to ensure governmental regularization of revenue and citizens welfare from digital apps and IoT ecosystem. Map-based digital portal will be developed that provides citizens and governing bodies with visual analytics to understand complex municipal data e.g. a citizen can see the analytics of pollution, crimes, road conditions, load shedding timing, street light conditions of any postal code. Governing bodies can use data for policy making, and monitoring. The digital portal will have support of search engine, analytics and heat maps support.</p>
5.	<p>Innovative Secured Systems Lab (ISSL), National Center for Cyber Security</p> <p>PI: Dr. Sadeeq Jan <b>Funded by:</b> HEC</p>	<p>Innovative Secured Systems Lab (ISSL) is established at UET Peshawar as part of the National Center for Cyber Security, a joint venture of HEC and Planning Commission. The aim of ISSL is to address cyber security issues and provide indigenous solutions for security testing of web-based systems, enhancing the security of IoT Devices and using blockchain technology for developing secure web and mobile applications. There are three sub-labs of the ISSL lab, i.e., Security Testing Lab, Secured IoT Devices Lab and BlockChain Security Lab. All of these labs have demonstrated excellent progress beyond their KPIs and developed several cyber security products and frameworks including: effective vulnerability detection tools for web applications, automated tool for security asset classification, testbed for training and testing on web-based vulnerabilities, permission analyzer for mobile applications, framework for security assessment of Pakistani banks, anonymous chat application for mobile, diamond supply chain application, fabricated prototype for cyber secure smart logistics etc. These tools have been tested successfully and some of them have also been delivered to the industrial partners. In addition, the researchers of the labs have published more than 15 research papers in well-reputed international conferences and journals having high impact factors. ISSL Lab have also offered a number of workshops and seminars to create awareness on Security issues in Pakistan. Further, the lab also offers 6 months training courses on security and ethical hacking under the Prime Minister Kamyab Jawan Program. A number of MS and PhD students are conducting their research in the lab in various fields of cyber security.</p>

## Department of Chemical Engineering

S.No.	Title of Project (Principal Investigator)	Outcome (Expected Benefits to Society)
1.	<p>Design and structure modulation of nano-composite membrane with bi-interception for juice concentration</p> <p>PI: Prof. Dr. Saeed Gul</p>	<p>Produced one Ph.D, three M.Sc students and 05 Impact Factor Research publications. Pilot-plant fabricated for experimental investigation of fruit juice concentration. Geopolymeric membrane pores and porosity were optimized.</p>

## Department of Mining Engineering

S.No.	Title of Project (Principal Investigator)	Outcome (Expected Benefits to Society)
1.	National Centre of AI Development of Intelligent Mineral Resource Estimation and Intelligent Mine Planning Algorithms  PI: Dr. Khan Muhammad	The research outcomes are providing solutions to the industry at National and International levels in mineral resource estimation, mine design and production scheduling through IoT and AI-based algorithms. Researchers, interneers and students from these projects emanate to find excellent job placement globally.
2.	Mineral Resource Estimation and Mine Planning for Copper ore Project North Waziristan  PI: Dr Khan Muhammad	Mineral Resource estimation and Mine Design were provided to the Mineral Exploration Development Organization (MEDO) FWO for the first of kind mining venture in Pakistan.
3.	Technical and Economical design of placer gold extraction plant flowsheet  PI: Dr. Ishaq Ahmad	The project has developed an indigenously designed gold processing unit that is useful for processing placer deposits in Pakistan. Several students at BSc, MSc, and PhD levels have emanated from this project.
4.	Up gradation, utilization and value addition of KP coal Resources  PI: Dr. Khan Muhammad	The project has developed an indigenously designed coal processing unit that is useful for upgrading coal deposits in Pakistan. Several students at BSc, and MSc, levels have emanated from this project.
5.	Mineral Resource Estimation of Shinkai Copper Deposit for PMDC  PI: Dr. Khan Muhammad	Mineral Resource estimation of copper deposit was provided to the Pakistan Mineral Development Corporation FATA for coper deposit at Shinkai North waziristan

## Center for Industrial and Building Energy Audits (CIBEA)

S.No.	Title of Project with PI	Outcome (Expected Benefits to Society)
1.	Center for Industrial and Building Energy Audits (CIBEA) PI: Prof Dr. M. A. Irfan <b>Funded by:</b> (HEC-TDF) Rs. 12 Million	Conducted Energy Audits in some University Departments and presented its results to the University in a seminar, "Energy Savings in Universities." The projected savings by applying the energy conservation measures can be up to Rs. 18 Million per annum. Conducted an extensive Energy Audit of FF Steel Mill, Lahore. The resulting energy conservation measures can lead to a saving of ten of millions rupees per annum. Funded two merit based scholarships to the students from field of energy.

S.No.	Project Name	Duration
1.	UNIDO KP and Baluchistan Region	2019-On going
2.	Millac Food	Aug-20
3.	Nust Fazal Steel	Mar-21
4.	Peshawar Chemicals	May-21
5.	Sarhad Paper	Aug-21
6.	NEECA Captive Power Plant Project ***	Dec 2020- Oct 2021
7.	KPOGCL Project (Dr. Arif Khattak)	July 2021 - Sep 2021

## Department of Industrial Engineering, Jalozi Campus

S.No.	Title of Project with PI	Outcome (Expected Benefits to Society)
1.	Design and Manufacturing of Assistive Devices used in Physical Rehabilitation of Disable People using Additive Manufacturing Technology  PSF (Triple Helix model)  PI: Prof. Dr. Sahar Noor Co-PI: Dr. Tufail Habib	The project is funded by PSF. It is about development of assistive devices for disable people. Two PhD and one MSc student working on the project, the outcome and benefits of the project are: <ul style="list-style-type: none"> <li>▶ Customized assistive parts and devices for the disabled people in Pakistan.</li> <li>▶ Reduced material wastes using FDM technology for sustainable production.</li> <li>▶ Ergonomic designs of assistive devices will be tested on patients at Paraplegic center.</li> <li>▶ Technology transfer to Paraplegic center Peshawar</li> </ul>

## Department of Basic Science & Islamiat

S.No.	Title of Project with PI	Outcome (Expected Benefits to Society)
1.	A Computational Meshless Procedure for Interface Problems PI: Prof. Dr. Siraj-ul-Islam	To produce Ph.D students and research publications in top notch journals and to produce applied mathematicians who can work in multi-disciplanry environment of Bio-medical engineering and computation fluid dynamics.
2.	Mathematical Models for Segmentation of MRI and Mamograme Images and Applications (HEC NRPU) PI: Dr. Noor Badshah	Produced one Ph.D. student and two research publications.

## **Kamran Bangash Approves the Solarization of UET Peshawar**

Mr. Kamran Bangash, Minister for Higher Education, Archives and Libraries and Mr. Hamayat Ullah, Advisor on Energy and Power KP visited UET Peshawar March 04, 2021. Mr. Kamran Bangash, gave the approval to initiate the “Solarization of UET Main Campus, project” while adding he said, the KP Govt is focused on bringing all nine public sector universities on solarization so that overall power load is reduced for the whole province subsequently.



He stressed that academic linkages signed with industry should have real outcome which benefits the society. He directed UET to start the technical work for other universities as UET Peshawar is a leading university of the province and we expect that it will come up as a recognized brand across the province. Mr. Hamayat Ullah, Advisor on Energy and Power KP said, project management needs to be strengthened for such mega projects and assured UET Peshawar that the Govt. will strengthen UET for enhancing its consultancy services.

Dr. Najeeb Ullah, Project Director Swat University of Engineering Technology Peshawar briefed the delegation about the solarization project of UET Peshawar. He said, through solarization UET Peshawar will cover 2 MW and save Rs 9.5 million annually. At present, UET is getting electricity from PESCO

at the cost of Rs. 20 per unit which costs UET around Rs. 32 million annually. He said that the parties including UET Peshawar, ESCO PVT (Ltd.) and PEDO will work together through a 25 years agreement to be signed in the near future. The project will also help UET to save money through net metering.

Prof. Dr. Iftikhar Hussain, Vice Chancellor, said that the solarization project to be launched from May 2021 will get operational by the end of year. He said it would be huge transformation from conventional to renewable energy.

Prof. Dr. MA Irfan, Dean, Faculty of Mechanical Engineering and Dr. Adnan Dawood, Director USPCAS-E gave presentations to the delegation. Later, the delegation visited UET Gems and Jewelry Center of Excellence and Earthquake Engineering Center. Prof. Dr. Siraj-ul-Islam, Dean Faculty of Architecture, Dr. Khizar Azam Khan, Prof. Dr. Misbah Ullah, Treasurer, Mr. Naeem Khan, CEO PEDO and other officials were also present on the occasion.

## **Taj Muhammad, Special Assistant to the CM KP for Energy Visits Center for Advanced Studies in Energy**

Mr. Taj Muhammad, Special Assistant to the Chief Minister Khyber Pakhtunkhwa for Energy visited the Center for Advanced Studies in Energy, UET Peshawar on June 17, 2021. UET Peshawar is playing a leading role in training the younger generation in the field of renewable energy. He expressed satisfaction over the progress of CAS, UET Peshawar after visiting the state of the art facilities and meeting with the faculty. He ensured full support to the Center in the field of energy and ensured that MoU will be signed in near future after the technical consultation of concerned officials from UET Peshawar and Pakhtunkhwa .Energy Department (PEDO). He also directed the Energy

Department to hold a joint meeting with CAS to look into the possibility of establishing the KP Energy Efficiency and Conservation Agency KPEECA on the similar lines, Punjab has established the PEECA.



# Research & Development

The Vice Chancellor Prof. Dr. Iftikhar Hussain said, as a premier seat of learning in energy, the Center was awarded the “think tank” status in energy in 2017. He said, CAS has got the latest equipment and trained faculty from Arizona State University USA to act as a hub of energy solutions to the current energy crises. Dr. Adnan Daud, Director CAS said that the Center has a solar testing facility based on international standards and recommended that the Solar Testing Center (STC) may be declared as “Technical Consultant” for the KP Govt. to create stronger collaborations with industry and Govt.

Dr. Najeeb, Project Director UET Swat said the center has worked closely with the KP Government at various policy level projects including "Power Policy for Khyber Pakhtunkhwa"; "ten years energy plan for erstwhile FATA" mega project for preparing the Low Cost Solar Panels in Hattar through STC and established the Center for Industrial and Building Energy Audits (CIBEA)

which has so far audited ten projects from Khyber Pakhtunkhwa and Balochistan.

Dr. M.A Irfan, Director CIBEA stressed for setting up the KP Energy Efficiency and Conservation Agency (KPEECA) to act as a regulatory agency that will help in saving the electricity, reduce load shedding and reducing cost. Mr. Asad Mehmood, Director National energy Efficiency Conservation Agency (NEECA) and Dean Mechanical, Chemical and Industrial Prof. Dr. Sahar Noor also spoke on the occasion.

## Seminars, Workshops & Conferences

### Workshop on Sustainability in Process Industry (SPI-2020)

A two-day online International Conference on Sustainability in Process Industry (SPI-2020) was held on 15th & 16th December, 2020 at UET Peshawar. Prof. Dr. Iftikhar Hussain, Vice Chancellor was the chief guest at the opening ceremony. Vice Chancellor in his address said, the universities are focused on conventional education but it is time to diversify non-conventional engineering programs to add value and innovation in the field. He said that hosting such an event during the pandemic of Covid-19 is appreciable to gather best minds under one roof that will help share knowledge and experience. He urged on the students and faculty to take full advantage of the opportunity to learn from the world renowned experts and researchers.

The closing ceremony was held on 16th December, 2020. Prof. Dr. Siraj-ul-Islam, Dean Faculty of Architecture and Allied Sciences, was the chief guest on the occasion. Prof. Dr. Siraj-ul-Islam in his address said, Khyber Pakhtunkhwa is full of resources however, we have not been able to exploit for industrialization. He said, sustainability is critical for our future otherwise future will be insecure for society, it is critical to gather best ideas to share relevant knowledge. He hailed the efforts of the Chemical Engineering Department for organizing this conference through indigenous resources amid current challenges of Pandemic.

Prof. Dr. Mudassar Habib, Chairman Department of Chemical Engineering and Chair, SPI Conference informed that the main theme of the Conference was "proper utilization of indigenous resources for a sustainable future". The key note speakers from Turkey, Russia, Malaysia, Australia and Saudi Arabia attended online and in total 60 papers were presented. The main topics included: sustainable environment, energy engineering, renewable energy water resource management and water waste management etc. He appreciated the government for taking a major policy decision for utilising renewable energy for a greater share upto 60% in its "energy mix", adding, this shows Government's vision towards a sustainable development agenda. He also said, the recent decision of Government to remove peak hours from the textile industry has restored its confidence that will help in improving



production and gradually take out the country from a crippling economic state.

Later, souvenirs were distributed to the Conference Chairs, Co Chairs and Organizers. A large number of senior professors, faculty members, students and guests from industry were also present on the occasion. The conference was held in joint collaboration of the Pakistan Scientific and Technological Information Center (PASTIC) and organized by the Chemical Engineering Students Society (PiChe) UET Peshawar Chapter.

### Workshop on the Student Facilitation Center

A one day workshop on "Student Facilitation Center" was held on September 3rd 2020. The objective of this workshop was to create support



for establishing the Centers at all departments. The Pro-Vice Chancellor, Prof. Dr. Qaisar Ali was the chief guest on the occasion. He said the SFC is aimed to help the students in their academic issues during their stay at University adding "universities are established to facilitate the students if there is no enough support for the students it would have no purpose". The SFC was first established at the Civil Engineering Department with limited resources. Similar SFCs will be established at each department to deal with the students and guide them about different processes throughout their studies.

Prof. Dr. Hamid Ullah, Director Undergraduate Studies said, the SFC would aim at providing important services under one roof to the students of University. Presently, the services on offer include applying for and receiving various documents/certificates related to Examinations and their academic steps.

## Research / Conference Publications / Book Chapters

- ▶ Akhtar Gul, Wisal Ahmed, Khan Shahzada, Bashir Alam, Yasir Irfan Badrashi, Sajjad Wali Khan, Nauman Wahab, and Naisr Ayaz, “Strengthening and Characterization of Existing Reinforced Concrete Beams for Flexure by Effective Utilization of External Steel Elements”, *Advances in Structural Engineering*, 2020.
- ▶ Mohammad Adeel Khan, Bazid Khan, Khan Shahzada, Sajjad Wali Khan and Nauman Wahab “Conversion of Waste Marble Powder into a Binding Material” *Civil Engineering Journal*, 2020.
- ▶ M. Faisal Javed et al. & Sajjad Wali Khan, “Transport of Jeffrey nonmaterial in cubic autocatalytic chemically nonlinear radiated low with entropy generation”, *Journal of Applied Nanoscience*, 2020.
- ▶ Ateeq Ur Rehman and Kamran Ahmed, “Line Load Analysis of Live Load Models for Short to Medium Span Lengths Bridges in Pakistan”, *Journal of Environmental Treatment Techniques (JETT)*, 2020.
- ▶ Muhammad Israil, Muhammad Ashraf, Muhammad Fahim, Rashid Rehan, Sajjad Wali Khan and Shabir Hussain, “Evaluation of Bentonite Mixed Indigenous Clays for Development of Clay Liners”, *Civil Engineering Journal*, 2020.
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  - Shaohua Yan, Ahmad Nawaz, Bilal Islam, Ishaq Ahmad, Iftikhar Hussain, “Elastic-plastic deformation behavior of sapphire M-plane under static loading using nano-indentation”, Ceramics International, Volume 47, Issue 16, (August 2021).
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  - Aqsa Amir, Saira Bibi, Ahmad Nawaz, Ather Ibrahim, Muhammad Naeem Ashiq, Muhammad Qamar Saeed, Mashhood Hamza, Hafiz Muhammad Zubair Rasheed, Bilal Islam “In vitro antibacterial response of ZnO-MgO nanocomposites at various compositions”, Applied Ceramics Technology, Volume 18, Issue 5, (2021).
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## Student Research Projects 2020-21 (B.Sc. M.Sc. & Ph.D.)

Every student does a project as part of curriculum. Following are the projects undertaken during July 2020 to June 2021. Our Undergraduate and Postgraduate students are vigorously involved in applied research which is approved by BOASAR mentioned below:

- Ahmad Faraz, Muhammad Sulaiman, Fatima Khatoon, “to Evaluate the Flexural Behavior of Hollow reinforced Concrete Beam Through Numerical Modeling” Department of Civil Engineering.
- Aqeel Ur Rehman, Aqib Ahmed, Asmat Ullah, “Response of Basement Wall in Tall Buildings Under Lateral Loading”, Department of Civil Engineering.
- Arshad Khan, Nasruminallah, Farooq Ahmad Khan, “Experimental Investigation of Rebar Slip in Beam-Column Joints”, Department of Civil Engineering.
- Shumaila Feroz, Hina Ahmad, Muhammad Ehsan Khan, Zarak Khan, “Traffic and Environmental Impact of BRT Peshawar at University Road Peshawar using Vissim Simulation Software”, Department of Civil Engineering.
- Muhammad Irfan, Muhammad Nisar Khan, Muhammad Bilal, “Standardized Building Implementation through BIM”, Department of Civil Engineering.
- Mir Salam, M.Yasir Sajid and M. Murtaza Nawb, “Impact of climatic change on Agriculture of Charsadda, Mardan and Nowshera ( Kabul River Water Resources )” supervisor Dr. Asif Khan, Department of Civil Engineering, Jalozai Campus.
- Hamza Shehzad, Abdullah and Junaid Shafique, “Assessing potential of Warm Mix Technology Adoption in Pakistan” Supervisor Engr. Muhammad Waseem, Department of Civil Engineering, Jalozai Campus.
- Salman Gul, Muhammad Mustafa, and Bahadar Sher, “Numerical modelling and analysis of RC-ECC composite (layered) beams” Supervisor Dr. Sajjad Wali Khan, Department of Civil Engineering, Jalozai Campus.
- Ayub Ashraf, Usman Ayub and Saad Sohail Burki, “Smart Neck Cowlers For Dairy Cows Received Ignite funding (FYP Code: NGIRI-2021-8610)” Supervisor Dr. Bilal Habib, Department of Computer Systems Engineering.
- Junaid U. Shah, Muhammad Inam and Yasir Ahmad, “Monitoring of Micro-Hydro Power Plant Using Internet-of-Things (IoT) Received Ignite funding (FYP Code: NGIRI-2021-10071)” Supervisor Dr. Bilal Habib, Department of Computer Systems Engineering.
- Muhammad Asif Ayub, Syeda Husna Shakir and Assad Ullah Khan, “Improving the Performance of Detection, Recognition and Positioning”, Supervisor Dr. Nasir Ahmed, Department of Computer Systems Engineering.
- Najma Bibi, “Art Beyond sight”, supervised by Ar. Salman Jamil, Department of Architecture, Abbottabad.
- Mansoor Iftikhar, “Bio-Mimicry: Using Nature as a Model to design Resort and Tree Restaurant Design in Galliyat KpK”, supervised by Ar.Habib Ullah, Department of Architecture, Abbottabad.
- Rahat Ullah, “Space of Spirituality”, supervised by Ar. Ar. Urooj Shafique, Department of Architecture, Abbottabad.
- Dr. Muniba Ashfaq, “Retrospective image registration for medical image analysis and diagnosis” Department of Computer Systems Engineering.
- Dr. Amaad Khalil, “Iterative joint source and channel coding aided video communication” Department of Computer Systems Engineering.
- Dr. Durr-e-Nayab, “Adaptive expanding ring search based per hop rendition of routing in MANETs using machine learning” Department of Computer Systems Engineering.
- Engr. Umair Khan, “Macroscopic Traffic Flow Modeling Based on the Gap Filling Behavior of Heterogeneous Traffic”, NIUIP.
- Engr. Sulaiman Khan, “Development of GIS Based Decision Support System for Optimum Resources Allocation in WASH and Related Sectors”, NIUIP.
- Engr. Mubashar Sheheryar, “Modelling the Environmental Impact of PCC Replacement with UHPC: A System Dynamics Approach”, NIUIP.
- Asfand Yar Ali, " Optimized Charge Discharge Control Algorithm for Distributed Battery Energy Storage Systems in Smart Grids" Supervisor Dr. Abdul Basit, Department of Electrical Energy System
- Hurmat Khan, " Study of charging and discharging behavior of phase change materials (PCMs) in real environmental conditions", Supervisor Dr. Khurshid Ahmad, Department of Thermal Energy System.
- Owais Ahmad," Design, Performance and Feasibility Assessment of Solar PV System for Irrigation", Supervisor Dr. Adnan Daud Khan, Department of Renewable Energy Engineering
- Junaid Ali Shah, Mian Wajid Layaq, Iqra Bashir, “Assessment of Irrigation Water Quality of Warsak Gravity Canal, Peshawar”, Supervisor by Prof. Dr. Taj Ali Khan, Department of Agricultural Engineering.
- Danish Khan , Jawad Hussain and Shehriyar Khan, “Discharge and Pressure Telemetry System for Sprinkle Irrigation using IOT and Sensor”, Supervisor Prof. Dr. Zia Ul Haq, Department of Agricultural Engineering
- Anees Hassan, Muhammad Bilal and Adil Hussain, “Projection of Temperature and Precipitation Over KP from CMIP6”, Supervisor Prof. Dr. Muhammad Shahzad, Department of Agricultural Engineering
- Engr. Muhammad Idris, “Piled Raft Response under Axial load-An Experimental and Numerical study”, supervised by Dr. Irshad Ahmad, Department of Civil

# Research & Development

Engineering.

- Engr. Nisar Ul Haq, "Assessment of Bridget Pier Scour Depth and its Reduction Countermeasures Using Numerical Model", supervised by Dr. Mujahid Khan, Department of Civil Engineering
- Engr. Muhammad Haris, "Experimental Investigation on the Behaviour of Confined Rat Trap Bond Masonry", supervised by Dr. Mohammad Ashraf, Department of Civil Engineering
- Engr. Suleman Ayub Khan, "Determination of Mechanical Properties of Marble Cement Mortar Fly Ash and Rice Husk Ash" supervised by Dr. Khan Shahzada, Department of Civil Engineering.
- Engr. Muhammad Irshad Khan, "Numerical Study of Pile Foundation under Lateral Load", Dr. Irshad Ahmad, Department of Civil Engineering.
- Engr. Uzair, "To Study the Effect of Model Scale Factor on the Behavior of Brick Masonry", supervised by Dr. Mohammad Ashraf, Department of Civil Engineering.
- Engr. Mutahir Abbas, "Strength and Economical Implication of Dried and Wet Grouting of Cracked Masonry Heritage Structure", supervised by Dr. Muhammad Adil, Department of Civil Engineering.
- Engr. Mansoor Qadir, "Improvement of eccentric steel brace retrofitting technique for RC Frames", supervised by Dr. Naveed Ahmad Associate Professor, Department of Civil Engineering.
- Engr. Waqas Umar, "To quantify the heavy metals uptake through phytoremediation process from soil for different contaminant concentrations", supervised by Dr. Salman Saeed, Department of Civil Engineering.
- Engr. Saif Ullah, "Micro Mechanical analysis of asphalt concrete pavements using discrete element method", supervised by Prof. Dr. Rawid Khan, Department of Civil Engineering
- Engr. Rehman Ullah, "The impact of systematic and non-systematic risk on stock return (oil and gas industry)", supervised by Dr. Rehman Akhtar, Department of Civil Engineering
- Engr. M. Shah Khaid, "Analysis for Travel Mode Selection using Analytic Hierarchy Process. Case study of Peshawar City, Pakistan", Dr. Rawid Khan, Department of Civil Engineering.
- Engr. Ezaz Ali Khan, "Utilization of Waste Marble Powder as Partial replacement of cement in PVA-ECC: An experimental approach, Supervisor by Dr. Sajjad Wali Earthquake Engineering.
- Engr. Waheed Ullah, "Upgradation of Functions, used for Quantifying Seismic & Flood Resilience of Bridges", supervised by Dr. Syed Muhammad Ali, Department of Civil Engineering.
- Engr. M. Ishfaq, "Effect of high volume replacement of wheat straw ash with and without silica fume on strength and micro-structure properties of high strength Green concrete", supervised by Dr. Khan Shahzad, National Institute of Urban

Infrastructure Engineering.

- Engr. Afaq Ahmad, "Effect of high volume replacement of Sugarcane bagasse ash with and without silica fume on strength and microstructural properties of high strength concrete (Green Concrete)", supervised by Dr. Khan Shahzada, National Institute of Urban Infrastructure Engineering.
- Engr. Khalil Ur Rehman, "Effect of high volume replacement of Rice Husk Ash with and without Silica Fume on Strength and Micro-Structure Properties of High Strength Concrete", supervised by Dr. Khan Shahzada, National Institute of Urban Infrastructure Engineering.
- Engr. Sulaiman Khan, "Development of a GIS Based Decision Support System for Optimum Resources Allocations in WASH and Related Sectors", supervised by Prof. Dr. Rashid Rehan, National Institute of Urban Infrastructure Engineering.
- Engr. Imad Said, "Carbon-Sink Light Weight Concrete Performance Under Fire", supervised by Dr. Qazi Sami Ullah, National Institute of Urban Infrastructure Engineering
- Engr. Faisal Habib, "Exploring the use of Ground Source Heat Pumps to offset domestic energy consumption in Pakistan", supervised by Dr. Salman Saeed, National Institute of Urban Infrastructure Engineering.
- Engr. Fawad Ahmad, "Evaluating Geotechnical Parameters of Clay Liners Developed with Additive of Bentonite in the Clay of Mardan Region", supervised by Dr. Khan Shahzada, National Institute of Urban Infrastructure Engineering
- Engr. Armaghan Siffat, "Effect of wheat straw ash in controlling the autogenous shrinkage of high performance concrete", supervised by Dr. Khan Shahzada, National Institute of Urban Infrastructure Engineering.
- Engr. Gauhar Amin, "Driver and Pedestrians Interactions Characterization", supervised by Dr. Zawar H. Khan, National Institute of Urban Infrastructure Engineering.
- Engr. Tanveer Qaiser, "Macroscopic Traffic Flow Modelling for Heterogeneous Traffic with Optimized Vehicular Emissions", supervised by Dr. Fayaz A. Khan, National Institute of Urban Infrastructure Engineering.
- Engr. Faryal Ali, "A microscopic traffic flow model based on the forward and rearward driver response", supervised by Dr. Fayaz A. Khan, National Institute of Urban Infrastructure Engineering.
- Engr. Ihtisham Liaqat, "Improvement of traffic breakdown by using 3D road marking", supervised by Dr. Zawar H. Khan, National Institute of Urban Infrastructure Engineering.
- Engr. Umair Khan, "Macroscopic Traffic Flow Modelling based on the Gap Filing Behaviour of Heterogeneous Traffic", supervised by Dr. Salman Saeed, National Institute of Urban Infrastructure Engineering.
- Engr. Nouman Khan Usama, "Effect of paper waste as cement replacement in rammed earth construction", supervised by Dr. Khan Shahzada, Institute of Urban

## Infrastructure Engineering.

- Engr. Abdul Wahab, “Energy Efficiency Resource Assessment for Hospitals of Peshawar City”, supervised by Prof.Dr.M.A.Irfan, CAS-E
- Engr. Owais Ahmad, “Design, performance and Feasibility Assessment of Solar PV System for Irrigation”, supervised by Dr. Adnan Daud Khan, CAS-E
- Engr. Arslan Ali, “Energy Efficiency Improvement in Power Generation Sector of Pakistan”, supervised by Prof. Dr. M.A. Irfan, CAS-E.
- Mushtaq Ahmad, “Synthesis and thermal activation of Nitrogen rich grapheme for oxygen reduction reaction in Proton exchange membrane fuel cell”, supervised by Dr.M.Alam Zaib Khan, CAS-E.
- Arslan Ali, “Energy Efficiency Improvements in Power Generation Sector of Pakistan”, supervised by Prof. Dr. M.A. Irfan, CAS-E.
- Engr. Jibran Ullah Khan, “Investigating PI and PID controllers for DFIG installed at micro hydro turbine”, supervised by Dr. Abdul Basit, CAS-E
- Engr. Riaz Ahmad, “Performance Improvement of Pervoskite solar cells via precise dimension and interfacial positioning of plasmonic nanoparticles”, supervised by Dr.Adnan Daud Khan, CAS-E
- Engr. Madiha Qayyum, “Study of Bio Electrochemical Cell Using Citrus food as Electrolyte”, supervised by Dr.Adnan Daud Khan, CAS-E
- Engr. Muhammad Umair, “Study of the effect of floating solar panels on improving the performance of photovoltaic panels and reducing water evaporation”, supervised by Dr.Adnan Daud Khan, CAS-E.
- Engr. Mushtaq Ahmed, “Synthesis and thermal activation of Nirtogen rich grapheme for oxygen reduction reaction in Proton exchange membrane fuel cell”, supervised by Dr. Muhammad Alam Zaib Khan, CAS-E
- Engr. Afraz Ahmad, “Rooftop PV systems Development in Khyber Pakhtunkhwa Barriers oand Smart Policy recommendations”, supervised by Dr.Adnan Daud Khan, CAS-E.
- Engr. Kiran Israr, “Generation Trend of Mega Hydro Projects: A case of Warsak Dam”, supervised by Dr. Abdul Basit, CAS-E.
- Engr. Zoya Khan, “Optimizing power generation by integrating distributed generation in a micro grid using cost optimization technique”, supervised by Dr. Abdul Basit, CAS-E.
- Engr. Bushra Rasheed, “Assessment and Evaluation of Photovoltaic System based Net Metering in Pakistan”, supervised by Dr.Affaq Qamar, CAS-E.
- Engr. Muhammad Ans, “Blockchain-based energy trading in Micro Grids”, Supervised by Dr.Affaq Qamar, CAS-E.
- Syed Mazhar Shah, “Stability Analysis of Aluminum Air Battery”, Supervised by Dr. Muhammad Noman, CAS-E.
- Engr. Salman Sawar, “Technical Environmental and Socioeconomic Sustainability Assessment Models for Distributed Power Generation Systems”, Supervised by Dr. Abdul Basit, CAS-E.
- Engr. M.Imran Ahmad, “Investigation and performance evaluation of task specific ionic liquids for Calcium-based batteries”, Supervised by Dr. M.Noman, CAS-E.
- Engr. Shahzad Ali, “Computational Analysis of Thermofluid Behavior of Multi-configuration Micro channel Heat Sink”, Supervised by Dr. M.Hassan, CAS-E
- Mr Jawad Ahmad, “Energy Efficiency in Pakistan Industrial Sector: An Analysis of key Barriers”, Supervised by Dr. Zohaib Ur Rehman, CAS-E.
- Engr. Fazal Khaliq, “High-Performance Lead-Free peroovskite Solar Cell functionalized by cuprous oxide as a hole and fungsten disulfide as an electron transport materials”, Supervised by Dr. Adnan Daud Khan, CAS-E.
- Engr.Arfa Iffat Khan, “Canal Top PV Reflectors for Enhanced Solar Power Generation”, Supervised by Dr. Adnan Daud Khan, CAS-E.
- Engr. Malik Faisal Nawaz, “Synthesis and characterization of fly ash based polyamide coated geopolymeric membrane for fruit juice concentration”, supervised by Prof. Dr. M.Younas, CAS-E.
- Engr. Muhammad Tauqeer, “Thermal conductivity enhancement of organic phase change materials”, Supervised by Dr. Khurshid Ahmad, CAS-E.
- Engr. Umar Khayam, “A Blockchain-based smartgrid: An alternate paradigm in energy sector”, Supervised by Dr. Affaq Qamar, CAS-E.
- Engr. Qayum Ahmad Sahib, “Minimization of Forecasted error in integrated system of solar and wind power system”, Supervised by Dr.Affaq Qamar, CAS-E.
- Engr. Noman Ahmad Khan, “Investigating Forecasting Error in Electricity Scheduling”, Supervised by Dr. Affaq Qamar, CAS-E.
- Engr. Ijaz Ahmad, “Optimization of Renewable Energy sources in Different Regions of Khyber Pakhtunkhwa”, Supervised by Dr.Adnan Daud Khan, CAS-E.
- Engr. Abdullah, “Cost Optimization of grid-connected and off-grid hybrid system for a community in rural area of Pakistan”, Supervised by Dr.Abdul Basit, CAS-E.
- Engr. Haroon Khan, “Performance Analysis of Cascaded H-B Bridge Multilevel Inverters for Grid connected PV Systems”, Supervised by Dr.Abdul Basit, CAS-E.
- Engr. Dawood Shah, “Comparative Analysis of degradation of Monocrystalline solar panel in three dfferent district of Khyber Pakhtunkhwa Pakistan”, Supervised by Dr.Abdul Basit, CAS-E.
- Engr.M.Huzaifa Siddiqui, “Efficient Drive of Three Phase Induction Motor Using VFD”, Supervised by Dr.Abdul Basit, CAS-E.
- Engr.M.Abdul Mowahaib Khan, “Dispatch Optimization of a Power System with Integration of Renewable Power Plants”, Supervised by Dr.Abdul Basit, CAS-E.
- Engr. Waseem Ullah Khan, “Security Evaluation of IoT Devices based on datagram Transport Layer Security Protocol”, Supervised by r. Safar Nawaz Khan Marwat, CAS-E.
- Engr. Mian Ibad Ali Shah, “Market Intelligence using Descriptive Predictive &

- Prescriptive Analytics”, Supervised by Prof. Dr. Laiq Hasan, CAS-E.
- Engr. Ihsan Ali, “On the Estimation of Arbitrarily Shaped Impulse Responses for Single Image Blind Deblurring”, Supervised by Dr. Aftab Khan, CAS-E.
  - Engr. Khurshid Ahmad, “Congestion Awareness by Sending Congestion Information in Data Packet Algorithm for NoC”, Supervised by Dr. Muhammad Athar Javed Sethi, CAS-E.
  - Engr. Naveed Malik, “Designing and Analysis of Single Stage and Two Stage PV inverter Connected to Weak Grid System”, Supervised by Dr. Abdul Basit, CAS-E.
  - Engr. Sajad Ullah, “Role of Demand Side Management in Reliability of Distribution Network”, Supervised by Dr. Abdul Basit, CAS-E.
  - Shehla Noor, “Analyzing Cost optimizing Techniques for Electrification of Grid Connected and Islanded Microgrid”, Supervised by Dr. Abdul Basit, CAS-E.
  - Engr. Asfandyar Khalid, “Online Monitoring of Distributed Generation systems”, Supervised by Dr. Abdul Basit, CAS-E.
  - Farman ullah, “Optimal Design and Analysis of Integrating Solar Energy in Off-Grid Telecommunication Sites”, Supervised by Dr. Abdul Basit, CAS-E.
  - Engr. Yasir Anwar, “Dyes removal from wastewater using novel bio-adsorbents”, Supervised by Engr. Mansoor Ul Hassan Shah, CAS-E.
  - Engr. Muzamil Khan, “Energy Recovery from Organic waste using anaerobic digester”, Supervised by Dr. Zohaib Ur Rehman, CAS-E.
  - Engr. Zubair Ahmed, “Experimental Evaluation of Tribological Properties of Engine oil by using Cerium Oxide Nanoparticles”, Supervised by Dr. M. Alamzaib Khan, CAS-E.
  - Engr. Rifa Saleem, “Effective utilization of polyethylene plastic bags in Li-Ion coin cell batteries”, Supervised by Dr. Muhammad Noman, CAS-E.
  - Engr. Ahmad Armaghan, “Artificial Intelligence Based Monitoring of Power Electronic Interfaces on Smart Grid”, Supervised by Dr. Affaq Qamar, CAS-E.
  - Engr. Muhammad Naeem, “Techno-Economic Analysis of Standalone Hybrid Renewable Energy System”, Supervised by Dr. Zohaib Ur Rehman, CAS-E.
  - Engr. Umair Iqbal, “Techno-economic feasibility for the implementation of photovoltaic thermal (PVT) hybrid system in Peshawar, Pakistan”, Supervised by Dr. Arif khattak, CAS-E.
  - Engr. Azmat Ullah, “Optimal placement and coordination of renewable sources and electric vehicles for efficient operation of power system”, Supervised by Dr. Affaq Qamar, CAS-E.
  - Engr. Zaka Ullah, “Reliability enhancement of pv micro-inverters”, Supervised by Dr. Affaq Qamar, CAS-E.
  - Engr. Shayan Tariq Jan, “Efficiency & Stability Enhancement of Lead-Free Pervoskite Solar Cells using Novel Charge Transport Materials”, Supervised by Dr. M. Noman, CAS-E.
  - Engr. Basit Ali, “Data Security in Smart Metering: A Blockchain Based Approach”, supervised by Supervised by Dr. Salman Ahmed, Department of Computer Systems Engineering., Department of Computer Systems Engineering.
  - Engr. Ali Zeb, “Cyber Physical System for Bottleneck Detection and its Affiliated Cost using OBD-II”, supervised by Dr. Khurram S. Khattak, Department of Computer Systems Engineering.
  - Muhammad Fawad Akbar Khan, “Semantic Segmentation of Remote Sensing Data using Data Mining Techniques for Geological Mapping”, Supervised by Prof. Dr. Laiq Hasan, Department of Computer Systems Engineering.
  - Engr. Mohammad Imran Ali, “Solar Plant Monitoring using IoT: Current Trends and Future Methodologies”, Supervised by Dr. Khurram S. Khattak, Department of Computer Systems Engineering.
  - Engr. Haider Ali, “Cyber Physical System for Solar Energy Monitoring”, Supervised by Dr. Khurram S. Khattak, Department of Computer Systems Engineering.
  - Engr. Ateequr Rehman, “An Optimal Power Usage Scheduling for Energy Management under Utility and Renewable Energy Sources in Smart Grid”, Supervised by Dr. Zahid Wadud Mufti, Department of Computer Systems Engineering.
  - Engr. Misbah Ullah, “Short Range Communication Protocols: From Intelligent Transportation Perspective”, Supervised by Dr. Khurram S. Khattak, Department of Computer Systems Engineering.
  - Engr. Sehrish Mudassar, “Military reconnaissance Based IoT Data Traffic Scheduling”, Supervised by Dr. Safdar Nawaz Khan Marwat., Department of Computer Systems Engineering.
  - Engr. Faiz Ullah, “Selection of requirements elicitation technique for the development of ERP Software”, Supervised by Dr. Laiq Hasani, Department of Computer Systems Engineering.
  - Engr. Haider Abbas Afridi, “An investigation into the utilization of Depth information in Obstacle Avoidance and Navigation System for the Blind People”, Supervised by Dr. Aftab Khan, Department of Computer Systems Engineering.
  - Engr. Abdullah Hamid, “Fake News Detection in Twitter using Graph Analytics and NLP Techniques”, Supervised by Dr. Laiq Hasani, Department of Computer Systems Engineering.
  - Engr. Salman Khan, “Road Pothole Detection: A Cyber Physical Approach”, Dr. Khurram S. Khattak, Department of Computer Systems Engineering.
  - Engr. Jamal Khan, “Design of Smart Energy Management System using Arduino”, Supervised by Dr. Salman Ahmed, Department of Computer Systems Engineering.
  - Asima Bibi, “Automatic Liver Tumor Segmentation using Convolutional Neural Network”, Supervised by Dr. M. Salman Khan, Department of Computer Systems Engineering.
  - Engr. M. Nouman Khan, “Performance Analysis of spectral Unmixing and Band

- Ratios in Machine Learning Based Mineral Exploration Using Remote Sensing”, Supervised by Dr. Nasru Minallah, Department of Computer Systems Engineering.
- Engr. Summiya Ejaz, “Intelligent Pest Management System for Smart and Cyber-Secured Tele-farming”, Supervised by Dr. Salman Ahmed, Department of Computer Systems Engineering.
  - Engr. Abdul Rehman, “An IoT Based Scalable System for Remote Patient Monitoring”, Supervised by Dr. Tariq Kamal, Department of Computer Systems Engineering.
  - Engr. Imran Khan, “Modeling and Simulation of Milimeter Wave (mm Wave) Massive MIMO Antenna for 5G Application”, Supervised by Dr. Gulzar Ahmad, Department of Electrical Engineering.
  - Engr. Mudasir Khan, “Quality Improvement of Speech signals using different models”, Supervised by Dr. Tariqullah Jan, Department of Electrical Engineering.
  - Engr. M. Adil Khan, “Design and analysis of microstrip patch antenna operating at higher order modes”, Supervised by Dr. Shahid Bashir, Department of Electrical Engineering.
  - Engr. Muhammad Zeeshan, “Impact of a Non-Dedicated U-Turn on Traffic”, Supervised by Dr. Zawar Hussian Khan, Department of Electrical Engineering.
  - Engr. Laiba Jehangir, “Modeling and Simulation of Solar PV and Wind Hybrid Power System Using MATLAB/Simulink”, Supervised by Engr. M. Iftikhar Khan, Department of Electrical Engineering.
  - Engr. Muhammad Yawar Khan, “Multi-Band 5G Wireless Antenna”, Supervised by Prof. Dr. Syed Waqar Shah, Department of Electrical Engineering. Shah
  - Engr. Jehan Pervez, “Real Time Monitoring system of Power Transformer using IoT and GSM”, Supervised by Dr. Abdul Basit, Department of Electrical Engineering.
  - Engr. Bilal Ahmad, “Automatic classification of heart sounds using long short-term memory network”, Dr. Muhammad Salman Khan, Department of Electrical Engineering.
  - Engr. Khawar Iqbal, “Towards High Efficiency Non-Toxic and Non-Corrosive Persovskite Solar Cell”, Dr. Adnan Daud, Department of Electrical Engineering.
  - Engr. M. Sheryar Fulaly, “Enabling Unet Based Anechoic source separation Neural Network in Reverberant Conditions for Online and Offline applications”, Supervised by Dr. M. Salman Khan, Department of Electrical Engineering.
  - Rafat Ali, “Reduction of Cogging-torque in Axial-flux PM Machine”, Supervised by Prof. Dr. Amjad Khattak, Department of Electrical Engineering.
  - Engr. Pir Jalal Badshah, “Optimization and Modeling of a Standalone Hybrid Micro Grid for a Village of District Mardan”, Supervised by Dr. Abdul Basit, Department of Electrical Engineering. Engr. Musa Khan, “COVID-19 spread prediction in 3rd world countries using artificial intelligence”, Supervised by Dr. Gul Muhammad, Department of Electrical Engineering.
  - Engr. Muhammad Yasir Khan, “A Novel High gain compact antenna for 5G wireless communication”, Supervised by Dr. M. Irfan Khattak, Department of Electrical Engineering.
  - Ahmad Raza, “Power flow control using fact devices in power system with simulink software”, Supervised by Dr. Amjad Khattak, Department of Electrical Engineering.
  - Afaq Ahmed, “Automatic assessment of lymphocytes using artificial intelligence”, Supervised by Dr. M. Salman Khan, Department of Electrical Engineering.
  - Engr. Hidayat Ur Rehman, “Novel methodologies for limiting DC fault current for Half bridge modular multilevel converter”, Supervised by Dr. Amjad Khattak, Department of Electrical Engineering.
  - Engr. Muhammad Shahzad Khan, “Fabrication and Characterization of Graphenes based Foldable super-capacitor”, Supervised by Prof. Dr. Syed Waqar Shah, Department of Electrical Engineering.
  - Engr. Amjad Ali, “Modeling of Partial shading PV system to predict and achieve the peak power point using advance control technique”, Supervised by Dr. Amjad Ullah, Department of Electrical Engineering. Khattak
  - Engr. M. Islam, “Evaluation of pre-processing techniques for U-Net Based Automatic Liver Segmentation”, Supervised by Dr. M. Salman Khan, Department of Electrical Engineering.
  - Engr. Rohail Khan, “A comparative analysis of independent vector analysis (IVA) and independent component analysis (ICA) in terms of performance evaluation”, Supervised by Dr. Tariq Ullah Jan, Department of Electrical Engineering.
  - Engr. Basit Ali, “Model Predictive Control (MPC) based MPPT Technique for Solar Photovoltaic System under Winter Wealth Condition of Swat, Pakistan”, Supervised by Prof. Dr. Syed Waqar Shah, Department of Electrical Engineering.
  - Engr. Muhib Ullah, “Microgrid Scheduling with Islanding Constraints Based on Robust Optimization Technique”, Supervised by Dr. Amjad Ullah, Department of Electrical Engineering.
  - Engr. Abdul Majid Khan, “Comparative Analysis of Techno-Economic Feasibility of Different Hybrid Renewable Systems for Remote Area Electrification of Khyber Pakhtunkhwa”, Supervised by Supervised by Prof. Dr. Syed Waqar Shah, Department of Electrical Engineering.
  - Engr. Zawar Khan, “Adaptive clustering in Energy Efficient Routing Protocol for Mobile Nodes in WSNs”, Supervised by Dr. Majid Ashraf, Department of Electrical Engineering.
  - Engr. M. Rashid Raza, “Blockchain-based Smart Grid with Anti-Theft Detection Features”, Supervised by Dr. Affaq Qamar, Department of Electrical Engineering.
  - Engr. Salam Ullah, “Facial Expression Recognition Using Deep Learning”, Supervised by Dr. Gul Muhammad Khan, Department of Electrical Engineering.
  - Engr. Ibad Ur Rahman, “Alternative Sustainable Energy Building”, Supervised by Prof. Dr. Syed Waqar Shah, Department of Electrical Engineering.
  - Engr. Qazi Saifullah Khan, “Analysis and monitoring of 15 MW Power Plant; Power System Stability and Optimization using ETAP”, Supervised by Prof. Dr. Syed Waqar

- Shah, Department of Electrical Engineering.
- Dost Muhammad, “Prediction of Stock Market Trend using Machine Learning”, Supervised by Dr. Iftikhar Ahmad, Department of Computer Science & Information Technology.
  - Muhammad Danyal, “Prediction of Stock Prices with Deep Neural Network”, Supervised by Dr. Iftikhar Ahmad, Department of Computer Science & Information Technology.
  - Shah Zaib, “Evaluation and Comparison of IDS/IPS function of PF Sense with Snort Suricata”, Supervised by Dr. Sadeeq Jan, Department of Computer Science & Information Technology.
  - Muhammad Latif, “An Improved Authentication Protocol for IoMT using WMSN”, Supervised by Dr. Sadeeq Jan, Department of Computer Science & Information Technology.
  - Mr. Jawad Khan, “Quality of Service Characterization for ZigBee Networks”, Supervised by Dr. Suhail Yousaf, Department of Computer Science & Information Technology.
  - Afsheen Gul, “A Model for using Evolutionary Techniques for Security Testing”, Supervised by Dr. Sadeeq Jan, Department of Computer Science & Information Technology.
  - Engr. Abdul Aleem, “Estimation and Mitigation of Carbon Footprint of Nashpa Oil Field (NOF)”, Supervised by Prof. Dr. Hamid Ullah, Department of Mechanical Engineering.
  - Engr. Hassan Ud Din Hassam, “The Effect of Air Injection on Cavitation Erosion”, Supervised by Prof. Dr. Afzal Khan, Department of Mechanical Engineering.
  - Abdullah Khalil, “Permission analysis of frequently used mobile applications in Pakistan via reverse engineering”, Supervised by Dr. Sadeeq Jan, Department of Mechanical Engineering.
  - Muhammad Bilal Shahzad, “An Effective of Asset Classification for the Security of Web-based Systems”, Supervised by Dr. Sadeeq Jan, Department of Mechanical Engineering.
  - Mohammad, “An effective Approach for the detection of JSON injection vulnerability using an evolutionary algorithm”, Supervised by Dr. Sadeeq Jan, Department of Mechanical Engineering.
  - Muhammad Omer Bin Tauqeer, “A Systematic Analysis of security testing techniques to develop an effective approach for cross site scripting detection”, Supervised by Dr. Sadeeq Jan, Department of Mechanical Engineering.
  - Muhammad Saddam Hussain Shah, “Security testing of Web Services for injection vulnerabilities using genetic algorithm”, Supervised by Dr. Sadeeq Jan, Department of Mechanical Engineering.
  - Attaullah, “Assessing users awareness and user adaptation to the android privacy and security”, Dr. Aamir Saeed, Department of Mechanical Engineering.
  - Zara Akbar, “Visual, Auditory, Kinesthetic Learning Styles and Information and Communication Technology in Preschool”, Dr. Wajeeha Khalil, Department of Mechanical Engineering.
  - Umama Khalid Qazi, “Classification of Tobacco using Remote Sensing and Deep Learning Techniques”, Dr. Iftikhar Ahmed, Department of Mechanical Engineering.
  - Engr. Farman Ali, “Modeling Bus Bunching in BRT Peshawar using Petri Nets and Max Plus Algebra”, Dr. Shaukat Ali Khan, Department of Mechanical Engineering.
  - Engr. Azhar Farid Khan, “Numerical Simulation of Deposition of Solid Aluminum Nano Size Particles”, Dr. Kareem Akhtar, Department of Mechanical Engineering.
  - Engr. Nadeem ur Rehman, “Experimental and Numerical Analysis of Air Jet in Vertical Water Channel”, Dr. Kareem Akhtar, Department of Mechanical Engineering.
  - Engr. M. Haris Jan, “Vibration Monitoring of Shock Absorber”, Prof. Dr. Hamid Ullah, Department of Mechanical Engineering.
  - Engr. Ghufuran Ullah, “Experimental Investigation and Characterization of a 3D Printed Standard Specimen with varying process parameters”, Dr. Naveed Ullah, Department of Mechanical Engineering.
  - Engr. Imtiaz Ahmad, “Modeling and Simulation of Thermoelectric Vacuum Desalination System”, Dr. Umar Ibrahim, Department of Mechanical Engineering.
  - Engr. Sadam Hussain, “Comparative Analysis and Characterization of Open Cell Aluminum Foam with different Pores size per inch (pp) under Mechanical Loading”, supervised by Prof. Dr. Abdul Shakoor, Department of Mechanical Engineering.
  - Engr. Aizaz Khan, “Deploying AHP and QFD methodology for supplier's Selection”, supervised by Dr. Rehman Akhtar, Department of Mechanical Engineering.
  - Engr. Saad Abdullah, “The effect of posture orientation and vibration on trunk muscles for bike riders using Electromyography”, Prof. Dr. Shahid Maqsood, Department of Mechanical Engineering.
  - Engr. Mian Mehran Shah, “Reverse Logistics Network Model for Handling Returned Products and Cost Optimization”, Dr. Misbah Ullah, Department of Mechanical Engineering.
  - Engr. Muhammad Usman Khan, “Manufacturing of wooden-based composite tiles for improved utilization of saw mills wood waste”, supervised by Prof. Dr. Sahar Noo, Department of Mechanical Engineering.
  - Muhammad Asghar Khan, “Optimization of Electrical Bakelite Sheet Deploying Six Sigma”, Supervised by Dr. Rehman Akhtar, Department of Industrial Engineering.
  - Engr. Sohail Khan, “Enhancing Production Efficiency Through Facilitations and work study using NIOSH Lifting Equation”, supervised by Prof. Dr. Iftikhar Hussain, Department of Industrial Engineering.
  - Engr. Shaiq Ali, “Improving rejection rate in cigarette production”, supervised by Dr. Rehman Akhtar, Department of Industrial Engineering.
  - Syed Salman Ahmed, “Optimizing the quality of local steel industry using ANOVA”,

- supervised by Dr. Rehman Akhtar, Department of Industrial Engineering.
- Engr. Shabeer Ahmed, "Mapping Value Stream and Policy for Furniture Making Industries", supervised by Dr. Usman Ghani, Department of Industrial Engineering.
  - Engr. Saud Khan, "Effect of using Green building materials on estimation of HVAC load", supervised by Prof. Dr. Iftikhar Hussain, Department of Industrial Engineering.
  - Engr. Ibrahim Amin, "Evaluation of Truck-Shovel Fleet Performance Based on Fragmentation", supervised by Dr. Khan Muhammad, Department of Mining Engineering.
  - Engr. Wajahat Ali Khan, "Development of orthotic insoles using a low-cost 3D Scanning techniques, supervised by Dr. Izhar Ul Haq, Department of Mechatronics Engineering.
  - Engr. M.Usman, "A Novel approach for Fault Identification and Prediction in Rotary Machines", supervised by Dr. Shahzad Anwar, Department of Mechatronics Engineering.
  - Engr. Ali Murtaza, "Design & Developmental of a Non-Linear Controller for an Intelligent Knee", supervised by Dr. Izhar Ul Haq, Department of Mechatronics Engineering.
  - Engr. Shehbaz Ahmad, "Use of marble waste as additive in fired clay bricks", supervised by Dr. M. Imran Ahmad, Department of Chemical Engineering.
  - Engr. Ameer Ahmad Raza, Utilization of marble waste power as a replacement of white limestone for the production of white cement", supervised by Dr. M. Imran Ahmad, Department of Chemical Engineering.
  - Engr. Muhammad Farhan, "Utilization of marble industry's sludge in the bond, concrete blocks and detergents", supervised by Dr. M. Imran Ahmad, Department of Chemical Engineering.
  - Syed Zia Ullah, "Computational fluid dynamics of hollow fiber membrane contractor for the recovery of salts through osmotic membrane distillation", supervised by Prof. Dr. Muhammad Younas, Department of Chemical Engineering.
  - Engr. Kashif Khan, "Synthesis of hybrid geopolymeric membrane for forward osmosis application", supervised by Prof. Dr. Saeed Gul, Department of Chemical Engineering.
  - Engr. Abdul Munir, "Synthesis and Characterization of Geopolymeric Refractory Bricks Using Indigenous Pakistan fly Ash and Pumice Stone", Prof. Dr. Saeed GUL, Department of Chemical Engineering.
  - Engr. Ummer Khitab, "Green Corrosion inhibitor Alternative to Hydrazine for the treatment of Boiler feed water", supervised by Dr. Hayat Khan, Department of Chemical Engineering.
  - Engr. Muhammad Aftab Khan, "Mixing of coal and solid olive waste to enhance the properties of Hybrid fuel", supervised by Prod. Dr. Muddasarr Habib, Department of Chemical Engineering.
  - Engr. Ummer Khitab, "Green Corrosion Inhibitor Alternative to Hydrazine for the Treatment of Boiler Feed Water", supervised by Dr. Hayat Khan, Department of Chemical Engineering.
  - Engr. Misbah Ullah Qureshi, "Integration of f-CNTs into Glass fiber by Solution Dip coating and characterization via Nano-Indentation", supervised by Dr. Nehar Ullah.
  - Engr. Sohail, "A computational study of segregation of multicomponent species in a liquid fluidized bed under continuous process conditions", supervised by Dr. Syed Naveed Ul Hasan, Department of Chemical Engineering.
  - Engr. Muhammad Bilal, "Removal of Heavy Metal from Wastewater using Bio-waste Novel Adsorbents", supervised by Prof. Dr. Mohammad Younas, Department of Chemical Engineering.
  - Engr. Faisal Khan, "Experimental investigation of setting behavior of solid particle species in a modified setting tank", supervised by Dr. Syed Naveed Ul Hasan.
  - Engr. Muhammad Haris Nisar, "Alternative Fuels in Pakistan Cement Industry: A comparison in economy, emissions and energy content", supervised by Dr. Irshad Ali, Department of Chemical Engineering.
  - Mr. Asif Ahmad, "Neural Network for Segmentation of Medical Images", Supervised by Dr. Noor Badshah, Department of Basic Sciences & Islamiat.
  - Mr. Farooq Khan, "A Comparative Analysis of local and global meshless methods for elliptic PDES with multi points boundary conditions", Supervised by Prof. Dr. Siraj Ul Islam, Department of Basic Sciences & Islamiat
  - Mr. Muhammad Hussain, "Numerical Solution of Partial Differential Equations of Variable Order", Supervised by Dr. Marjan Uddin, Department of Basic Sciences & Islamiat
  - Mr. Latif Ullah Khan, "Numerical Evaluation of First-order Highly Oscillatory Ordinary Differential Equations", Supervised by Prof. Dr. Siraj Ul Islam, Department of Basic Sciences & Islamiat
  - Abdul Aziz, "A finite difference solution of variable order fractional differential equations", Supervised by Dr. Marjan Uddin, Department of Basic Sciences & Islamiat.
  - Farman Ullah, "Numerical Solution of Variable Order Fractional Differential Equations with Variable Coefficients", Supervised by Dr. Marjan Uddin, Department of Basic Sciences & Islamiat.
  - Mr. Saqib Saeed, "Electro-viscous effect on rotating disk flow with variable physical properties", Supervised by Dr. Rehan Ali Shah, Department of Basic Sciences & Islamiat.
  - Rabia Kanwal Awan, "Analysis of Water Based Carbon Nanotubes on a inclined Porous Sheet with Variable Magnetic Field", Supervised by Dr. Rehan Ali Shah, Department of Basic Sciences & Islamiat.
  - Mr. Aqib Javed, "A class of variable order differential equation and their numerical approximation", Supervised by Dr. Marjan Uddin, Department of Basic Sciences & Islamiat.

- Mr.Naqib Ullah, “ Electro-viscous Effect of Nano-Fluid Flow over a Rotating Disk”, Supervised by Dr.Rehan Ali Shah, Department of Basic Sciences & Islamiat.
- Mr. M.Basit Ali Khan, “Magnetic field dependent thermosolutal convection flow between two squeezing plates”, Supervised by Dr.Rehan Ali Shah, Department of Basic Sciences & Islamiat.
- Shabnam , “Theoretical Analysis of an Electro-viscous squeezing Nanofluid Fluid Flow”, Supervised by Dr.Rehan Ali Shah, Department of Basic Sciences & Islamiat.
- Faryal Gohar, “Mathematical modeling of cell mediated immunity response in COVID-19”, Supervised by Dr. Noor Badshah, Department of Basic Sciences & Islamiat.
- Maryam Saeed, “Variational Model for Segmenting Images having Noise and Blurred Edges”, Supervised by Dr.Noor Badshah, Department of Basic Sciences & Islamiat.
- Mr. Arif Ullah, “Deep Learning Approach for Segmentation of CT/MR Images”, Supervised by Dr. Noor Badshah, Department of Basic Sciences & Islamiat.
- Mr. Mehreen Fida, “Neural Network Integrated with Active Contour Model for Image Segmentation”, Supervised by Dr. Noor Badshah, Department of Basic Sciences & Islamiat.
- Engr. Asmat Ullah, “Development and evaluation of Modified polymer/MOF Mixed Matrix Membrane Material for post-combustion CO2 capture”, Supervised by Dr. Jamil Ahmad, Department of Chemical Engineering.
- Engr.Fazli Saeed, “Synthesis and Characterization of Geopolymeric Hydrophobic Membrane”, Supervised by Prof. Dr. Saeed Gul , Department of Chemical Engineering.
- Engr. Saima Hassan, “Performance Evaluation of Geopolymeric Composite Membrane for Fruit Juice Concentration through forward osmosis”, Supervised by Prof. Dr. Saeed Gul , Department of Chemical Engineering.
- Engr. Mustafa Ur Rehman, “Anon-invasive Force Myography Based System for Hand Gestures Classification Using Artificial Intelligence Techniques”, Supervised by Dr.Kamran Shah, Department of Mechatronics Engineering
- Engr. Amjad Khan, “Machine Learning Based Multi-renewable Energy Agent Model for Stability Enhancement of Smart Grid (SG)”, Supervised by Prof. Dr. Amjadullah Khattak, Department of Electrical Engineering.
- Engr. Waleed, “ Shah Jehan MIMO Communication for System Performance Upgradation:, Supervised by Prof. Dr.Syed Waqar Shah, Department of Electrical Engineering.
- Hijaz Ahmad, “Efficient Variational Iteration Algorithms for the Solution of Partial Differential Equations”, Supervised by Dr.Tufail Ahmad Khan, Department of Electrical Engineering.
- Engr. Taimur Ahmed Khan, “Adaptive Conformal Beamforming Array Antenna System with Autonomous Mutual Coupling Reduction and Desired Pattern Recovery in Deformed Structure for 5G Communication ”, Supervised by Dr. Muhammad Irfan Khattak, Department of Electrical Engineering.
- Mr. Hidayat Ullah, “A theoretical Analysis of an Electrolyte Liquid Flow between Concentric Cylinders”, Supervised by Dr.Rehan Ali Shah, Department of Basic Sciences & Islamiat.
- Engr. Imran Khan, “Topology optimization based on stress constraint, material nonlinearity and B-spline fitting of optimal design”, Supervised by Prof. Dr. Siraj-ul-Islam, Department of Basic Sciences & Islamiat.
- Engr. Hameed Ullah Khan, “Efficient coding and transmission of video stream over wireless channels”, Supervised by Dr. Arbab Masood, Department of Computer Systems Engineering
- Engr. Awab ur Rashid Durrani, “Wheat crop Detection & Estimation using Remote Sensing”, Supervised by Dr. Arbab Masood, Department of Computer Systems Engineering.
- Engr. Irfan Ahmed, “Techniques for Efficient Signal Recovery using Compressive Sensing”, Supervised by Dr. Aftab Khan , Department of Computer Systems Engineering.
- Mr.Izaz Ahmad Khan, “Reducing Resource Collisions in D2D Vehicular Communication”, Supervised by Dr. Syed Adeed Ali Shah, Department of Computer Systems Engineering.
- Engr. Waleed Khan, “Deep convolutional neural network based Tobacco Crop Detection and Estimation using Remote Sensing Technology”, Supervised by Dr. Nasru Minallah, Department of Computer Systems Engineering.
- Engr. Sumayyea Salahuddin, “Land Use & Land COVER Change Detection using Machine Learning Techniques”, Supervised by Dr. Nasru Minallah, Department of Computer Systems Engineering.
- Engr.Nasib Gul, “Inducing tolerance against drought stress in maize using Melatonin; its effect on plant growth, biochemical trails, antioxidant activities, water productivity and crop yield”, Supervised by Prof. Dr. Zia Ul Haq, Department of Agricultural Engineering
- Engr. Irfan Jamil, “Response of Piled Raft Foundation: An Experimental and Numerical Study”, Supervised by Prof. Dr. Irshad, Department of Civil Engineering.
- Engr. Yousaf Ali, “Wind Design Guidelines for structures in Pakistan”, Supervised by Dr. M. Adil, Department of Civil Engineering.
- Engr. Mian Asfahan Ali Gul, “Performance Evaluation of Exterior Beam-column Connection of Engineered Cementitious Composites (ECC) under Seismic Loading”, supervised by Dr. Sajjad Wali Khan, Department of Civil Engineering.
- Engr. M.Imran Hanif, “Effects of Seismic Risk Analysis on regional Sectors using Stochastic Modeling”, supervised by Dr. Rehman Akhtar, Department of Industrial Engineering.

# Innovation & Commercialization

## CHAPTER 4

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

UET Peshawar is the pioneer University in establishing the Office of Research Innovation & Commercialization (ORIC) i.e. on 3rd September 2012. This office 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 2020-21

S.No.	Key Performance Indicator	Score Assigned	Score Obtained
1.	Human Resource and Operations	15	9
2.	Research Support & Management	35	36.5
3.	Capacity Building	20	20
4.	Commercialization of Research	30	15
		<b>100</b>	<b>80.5</b>

## Research

### Research proposals approved for funding by HEC 2020-21

S.No.	Name of Agency	Name of PI	Thematic Area	Title of Research Proposal	Duration	Total Funding Approved (Rs.)
1.	NRPU	Dr. Qazi Samiullah	Earthquak Engineering	Seismic Evaluation and Retrofitting Confined Brick Masonry Buildings with FRP	23.10.2018 23.12.2021	6,311,038
2.	NRPU	Rehan Ali Shah	Fluid Mechanics	Electronic effect on Microfluidics/ nanofluidics over a rotating disc under a variable magnetic field	25.09.2019 25.09.2021	771,905
3.	NRPU	Siraj Ul Islam	Mathematics	A Computational Meshless Procedure For Interface Problems	27.09.2019 27.09.2022	829,637
4.	TDF	Dr. Muhammad Imran	Environmental Engineering	Marble industry: Case study on industrial symbiosis, envisioning zero waste	03.09.2018 03.08.2021	11,439,000
5.	TDF	Dr. Abdul Basit	Energy	Design and development of dynamic Power factor correction controller	03.09.2018 03.09.2021	7,955,000
6.	TDF	Dr. Muhammad Adil	Energy, Environmental Engineering	Development of Low Cost, Engineered, Energy Efficient, Sustainable Housing	03.09.2018 03.09.2021	6,287,000
7.	NCAI	Dr. Khan Muhammad	AI based mineral Resouce Estimation Models	Intelligent Information Processing Lab (IIPL)	15.02.2020 15.02.2023	43.9 (project in IIPL NCAI UETP) as part of 170 Million PKR for two labs of UET P
8.	NCAI	Dr. Khan Muhammad	AI based mineral Resouce Estimation Models	Intelligent Information Processing Lab (IIPL)	15.02.2020 15.02.2023	12.1 (project in IIPL NCAI UETP) as part of 170 million PKR for two labs of UET P)
9.	NCAI	Dr. Sadeeq Jan	Cyber Security	Innovative Secured Systems Lab (ISSL)	2018 2021	Total approved: 77.67M UET Share = 35.1M
10.	NCAI	Dr. Gul Muhammad	Artificial Intelligence	Intelligence system design/Intelligence Information Processing	Feb-2019 Feb-2022	179.6 million
11.	PERIDOT PAK-FRANCE Joint Proposals	Dr. M. Salman Khan		CovAid: A radiologist-informed explainable and robust deep learning framework for COVID-19 and lung diseases rapid screening using chest X-ray images	2021 2024	PKR 1,000,000 + € 19,750
12.	NCBC Research Fund	Dr. Suhail Yousaf	IoT and AI	Design and Developmen tof National Seismic Catalog for Earthquake Detection/Prediction	Jan 1, 2021 July 31, 2022	14.67 Million PKR

## Research Projects (completed in 2020-21)

S.No.	Name of Agency	Name of PI	Thematic Area	Title of Research Proposal	Duration	Status
1.	NRPU	Dr. Khan Shahzada Civil Engineering	Structure Engineering	Role of Infilled Walls on Lateral Stability of Reinforced Concrete Frame Structures	03.05.2017 03.05.2020	Completed
2.	TDF	Prof. Dr. MA Irfan Mechanical Engineering	Energy	Establishment of center for Industrial and Building energy Audits (CIBEA) at UET	22.05.2018 22.05.2020	Completed
3.	TDF	Dr. Khan Shahzada Civil Engineering	Structure Engineering	Performance of Confined dry Block Masonry Against Blast Loading	22.05.2018 22.05.2020	Completed
4.	TDF	Dr. M. Imran Ahmad Chemical Engineering	Environmental Engineering	Marble industry: A case study on industrial symbiosis, envisioning zero waste	03.09.2018 03.09.2021	Completed
5.	TDF	Dr. Abdul Basit EESE USPCASE)	Electrical systems, energy efficiency, power system control	Design and Development of dynamic power factor correction controller	03.09.2018 03.09.2021	Completed
6.	TDF	Dr. Muhammad Adil Civil Engineering		Development of low cost, Engineered, Energy Efficient Sustainable Housing	03.09.2018 03.09.2021	Completed
7.	SRGP	Dr. Muhammad Safdar, EEC		Liquefaction Susceptibility and Remediation measures of Nizampur Sand	April 2019 to June 2021	Completed
8.	NRPU	Dr. Awais Ahmed	Structure Engineering	Numerical modeling of damage in fiber reinforced composites	12.06.2018 12.06.2020	Completed
9.	NRPU	Dr. Sajjad Wali Khan	Structure Engineering	Performance of External Beam-column joint of Engineered cementitious composite under seismic type loading	08.06.2018 08.05.2021	Completed
10.	NRPU	Dr. Irshad Ahmad	Civil Engineering	Development of Ground Motion Prediction Equation for Pakistan	18.04.2019 18.03.2021	Completed
11.	NRPU	Dr. Marjan Uddin	Mathematics	Local Kernel Based Space-time Methods for initial and Boundary Value Problems	28.02.2019 28.02.2020	Completed
12.	TDF	Dr. M. Abdul Aziz Irfan	Energy	Establishment of center for Industrial and Building energy Audits (CIBEA) at UET Peshawar	22.05.2018 22.08.2020	Completed
13.	TDF	Dr. Khan Shahzada	Structure Engineering	Performance of Confined dry Block Masonry Against Blast Loading	22.05.2018 22.08.2020	Completed

## Joint Research Projects approved (National / International Funding Agencies)

S.No.	Name of Agency	Name of PI	Thematic Area	Title of Research Proposal
1.	HEC Pakistan	Prof. Dr. M.Tahir Khan Mechatronics Engg	Robotics & Automation in Agriculture and Biomedical sector	Advanced Robotics & Automation Lab affiliated with National Center of Robotics & Automation (NCRA)
2.	HEC Pakistan	Dr. Gul Muhammad Electrical Engineering	Artificial Intelligence	Artificial Intelligence
3.	HEC Pakistan	Dr. Muhammad Tufail Mechatronics Engg	Robotics & Automation	Robotics & Automation
4.	HEC Pakistan	Dr. Sadeeq Jan CS&IT	IoT Cyber	National Center for IoT Cyber
5.	HEC Pakistan	Dr. Nasru Minallah Director ORIC	Data Analytics & Cloud Computing	Data Analytics & Cloud Computing
6.	HEC Pakistan	Prof. Dr. Rizwan M.Gul, Mechanical Engg		HEC Pak-Turk Researchers Mobility Grant Program (Phase II)
7.	PERIDOT PAK-FRANCE Joint Proposals	Dr. Muhammad Salman		CovAid: A radiologist-informed explainable and robust deep learning framework for COVID-19 and lung diseases rapid screening using chest X-ray images

## Joint Research Projects completed (National / International Funding Agencies)

S.No.	Name of Agency	Name of PI	Thematic Area	Duration	Funding (Rs.)
1.	Millac Foods	Prof. Dr. M. A. Irfan Mechanical Engg	Energy Audit of Millac Foods	1.08.2020 to 15.10.2020	550,000
2.	UNIDO KP Industries	Prof. Dr. M. A. Irfan Mechanical Engg	Energy Management Systems within organizations in KP region related to ISO 50001	1.09.2019 to 30.12.2020	1,526,863
3.	UNIDO Baluchistan Industries	Prof. Dr. M. A. Irfan Mechanical Engg	Energy Management Systems within organizations in Balochistan region related to ISO 50001	1.08.2020 to 15.10.2020	1,526,863
4.	British Council Small Scale Research	Dr. Tariq Mahmood Khalil Dr. Zia Ul Haq,	Small, ultra-low head hydro power in irrigation canals	25.11.2019 to 24.11.2020	7837
5.	R&D services to Govt of KP	Prof. Dr. Akhtar Naeem	Structure Health Assessment of Main Building Judicial Complex D.I.Khan	27.1.2020 to 12.8.2020	2,000,000

# Innovation & Commercialization

## Research Proposals approved for funding (from non HEC source - National / International)

S.No.	Name of Agency	Name of PI	Thematic Area	Title of Research Proposal	Duration
1.	Deanship of Scientific Research, Ministry of Education, Saudi Arabia	Prof. Dr. M. Haseeb Zafar	Wireless Communications	Resource Allocation in D2D-V2V for 5G-enabled IoT Networks	2021-2022
2.	Deanship of Scientific Research, Ministry of Education, Saudi Arabia	Prof. Dr. M. Haseeb Zafar	Wireless Communications	An Efficient Resource Optimization Scheme for Device-to-Device Communications	2021-2022
3.	NAVTTTC	Dr. Suhail Yousaf	Training in contemporary Technologies	Hunarmand Pakistan, Kamyab Jawan program	06 May, 2020 30 Oct, 2020
4.	KP Govt Grant	Dr. Najeeb Ullah	Solar Materail	3rd and 4th Generations PV prototyping Lab	March 2019 On Going
5.	NGIRI	Aemal khan khattak	Artificial Intelligence	Brain control home automation	12/13/2020
6.	NGIRI	Farhan	Agriculture	seed planter	1/26/2021
7.	NGIRI	Hasan Ali	Industrial Engineering	Assessment of on campus university hostel facilities from sustainability perspective	1/1/2021
8.	NGIRI	Hasnain Sultan	Data Science	Person Localization and Crowd Sourcing in Aerial Images	11/16/2020
9.	NGIRI	Hassaan Ahmad	ML & AI	A Machine Learning Powered Mobile App to find Missing People	1/11/2020
10.	NGIRI	Himayat Jalil	Cyber Security	Cyber security IoT based lab automation	1/11/2020
11.	NGIRI	JUNAID USMAN SHAH	IoT	'Monitoring of Micro-Hydro Power Plant Using Internet-of-Things (IoT)'	1/10/2020
12.	NGIRI	M Babar zaman	Energy	'Design and fabrication of plastic waste to fuel convertor'	11/15/2020
13.	NGIRI	M. Asfandyar Khan	Bio Medical Engineering	CT Scan Analysis of Covid-19 Patients Using Machine Learning	6/12/2020
14.	NGIRI	Mohammad usman	IoT	Design and Fabrication or simulation IOT based maximum solar power tracking system	2/12/2020
15.	NGIRI	Muhammad Afnan Khan	Robotics	'Autonomous Agricultural Field Robot'	1/1/2021
16.	NGIRI	Muhammad Hamza Khan	Computer System Engineering	'Streamlining the Construction Supply Chain by Integrating Electronic Commerce Principles'	1/1/2021

17.	NGIRI	Muhammad Nouman	Bio Medical Engineering	Cardiac Arrhythmias detection Using Artificial Neural Network	1/6/2021
18.	NGIRI	Muhammad Owais Awan	Computer System Engineering	INNOVATING THE ENGINEERING LABS WITH VIRTUAL REALITY SUPPORTED EXPERIMENTATIONS	5/10/2020
19.	NGIRI	Muhammad Rehman	Bio Medical Engineering	CT Scan Analysis of Covid-19 Patients Using Machine Learning	6/12/2020
20.	NGIRI	Mohammad usman	IoT	Design and Fabrication or simulation IOT based maximum solar power tracking system	2/12/2020
21.	NGIRI	Muhammad Afnan Khan	Robotics	'Autonomous Agricultural Field Robot'	1/1/2021
22.	NGIRI	Muhammad Hamza Khan	Computer System Engineering	'Streamlining the Construction Supply Chain by Integrating Electronic Commerce Principles'	1/1/2021
23.	NGIRI	Muhammad Nouman	Bio Medical Engineering	Cardiac Arrhythmias detection Using Artificial Neural Network	1/6/2021
24.	NGIRI	Muhammad Owais Awan	Computer System Engineering	INNOVATING THE ENGINEERING LABS WITH VIRTUAL REALITY SUPPORTED EXPERIMENTATIONS	5/10/2020
25.	NGIRI	Muhammad Rehman	Bio Medical Engineering	'Sensor Based System for Gesture Recognition of Autism Disorder'	11/16/2020
26.	NGIRI	Muhammad Shahab	Mechatronics	Automatic Three Dimension Bending Machine	1/1/2021
27.	NGIRI	M. Umair Shahab	Energy & Environment	Power Generating and Waste water treatment plant	1/1/2021
28.	NGIRI	Saad Sohail Burki	Agriculture	Smart Neck Cowlars For Dairy Cows	1/9/2020
29.	NGIRI	Sajid Ali	Computer System Engineering	'Auction System App'	11/28/2020
30.	NGIRI	Salman khan	Bio Medical Engineering	Auto Temperature & Mask Scan Entry System	1/1/2021
31.	NGIRI	Sarmad Rafique	Bio Medical Engineering	Vision Aid Device for the Blind	11/16/2020
32.	NGIRI	Shehzad Ahmad Khan	Computer System Engineering	'Maternal Physical Activity Recognition System using Wearable Sensors '	11/16/2020
33.	NGIRI	Sikandar Waqar	Industrial Engineering	'Design and fabrication of industrial rig based on industry 4.0'	7/11/2020
34.	NGIRI	Touseef Ur Rehman	GIS	Land cover classification, crop detection and its area and yield estimation using remote sensing	11/16/2020
35.	IGNITE	Dr. Imran Ahmad	Virtual Reality	Innovating the engineering labs with virtual reality based experimentaion	3/1/2021 12/1/2021
36.	Pakistan Science Foundation (PSF)	Prof. Dr. Sahar Noor	Design and Manufacturing	Design and Manufacturing of Assistive Devices used in Physical Rehabilitation of Disabled People using Additive Manufacturing Technologies	March 2021 March 2024

## Research Projects (Completed in 2020-21)

S.No.	Name of Agency	Name of PI	Thematic Area	Title of Research Proposal	Duration
1.	Pakistan Air Force	Dr. Affaq Qamar USPCAS-E	Software Engineering	Development of mission analysis software FDR of K-8/P	11-2020 04-2021
2.	Directorate of Science & Technology, Govt. of KP	Dr. Izhar ul Haq, Mechatronics Engg:	Promotion of Scientific Innovation	Design of Anti Collision System to Assist Drivers in Smog and Fog.	Completed
3.	Ignite National Technology Fund	Dr Shahzad Anwar Mechatronics Engg:	Mechatronics	Design and Development of Machine Vision based Vein Finder	Nov 2019 Sep 2020
4.	Ignite National Technology Fund	Dr Shahzad Anwar Mechatronics Engg:	Mechatronics	Design and Development of a Low Cost Detachable Semi-Automated Wheelchair	Nov 2019 Sep 2021
5.	Ignite National Technology Fund	Dr. Uzair Gilani Electrical Engineering	Mechatronics	Ethical Hacking through Raspberry Pi W Zero	Nov 2019 Sep 2021
6.	Ignite National Technology Fund	Dr. M. Salman Khan Electrical Engineering	Electrical Engineering	Smart ECG	Nov 2019 Sep 2021
7.	Ignite National Technology Fund	Dr. Abu Bakar Electrical Engineering	Electrical Engineering	Design of DC - DC Converter with Maximum Power Point Tracking for Phtovoltaic Application	Nov 2019 Sep 2021
8.	Ignite National Technology Fund	Dr. Shahid Maqsood Industrial Electronics	Industrial Electronics	Design and manufacturing of Smart solar window	Nov 2019 Sep 2021
9.	Ignite National Technology Fund	Dr. Tufail Habib Mechanical Engineering	Mechanical	Analyzing the Effects of Heat Treatment: Reliability and Quality improvement of A Gearcase At Pakistan Locomotive Factory	Nov 2019 Sep 2021
10.	Ignite National Technology Fund	Dr. Arshad Mehmood Mechanical Engineering	Mechanical	Design and Fabricaiton of Advance Milk Transportation Tank	Nov 2019 Sep 2021
11.	Ignite National Technology Fund	Dr. Haider Ali Assistant Mechanical Engineering	Mechanical	Design and Fabrication of Plastic Waste to fuel Conveter	Nov 2019 Sep 2021
12.	Ignite National Technology Fund	Dr. Bilal Habib Computer System Engg:	Computer System Engineering	An IOT based House hold Power management System	2020 to 2021
13.	Ignite National Technology Fund	Dr. NasruminaAllah Computer System Engg:	Computer System Engineering	UAV based Land cover analysis using Remote sensing	2020 to 2021

14.	Ignite National Technology Fund	Dr. Laiq Hasan Professor Computer System Engg:	Computer System Engineering	Performance Improvement of wind energy system	2020 to 2021
15.	Ignite National Technology Fund	Dr. Salman Ahmad Computer System Engg:	Computer System Engineering	A novel audio and data signal modulator using visible light for long distance communication	2020 to 2021
16.	Ignite National Technology Fund	Dr. Arbab Masood Computer System Engg:	Computer System Engineering	Functional Electrical Simulation for foot drop	2020 to 2021
17.	Ignite National Technology Fund	Dr. Gul Muhammad Electrical Engineering	Electrical Engineering	AIOT based app for monitoring of a Smart city	Nov 2019 Sep 2021
18.	Ignite National Technology Fund	Dr. Gul Muhammad Electrical Engineering	Electrical Engineering	Gesture to speech for deaf and dumb patients	Nov 2019 Sep 2021
19.	Ignite National Technology Fund	Dr. Gul Muhammad Electrical Engineering	Electrical Engineering	Designing and Development of an Autonomous Blimp	Nov 2019 Sep 2021
20.	Ignite National Technology Fund	Dr. Muhammad Tufail Mechatronics Engg:	Mechatronics Engineering	Intelligent Pest Identification and Management Device	Nov 2019 Sep 2021
21.	Ignite National Technology Fund	Dr. Arshad Mehmood Mechanical Engineering	Mechanical Engineering	Design and Fabrication of Advance Milk Transportation Tank	Oct 2019 Sep 2020
22.	Ignite National Technology Fund	Dr. Haider Ali Mechanical Engineering	Mechanical Engineering	Design and Fabrication of Plastic Waste to Feul Converter	Oct 2019 Sep 2020
23.	Ignite National Technology Fund	Dr. Fakhre Ali Mechanical Engineering	Mechanical Engineering	Design and Fabrication of Food Waste Recycling Machine	Oct 2019 Sep 2020
24.	Ignite National Technology Fund	Engr. Arshad Ali Khan Mechanical Engineerinrg	Mechanical Engineering	Design and Fabrication of Waste Water Recycling System in Service Station	Oct 2019 Sep 2020

## Consultancy contracts executed through ORIC with Industry, Commerce & Government 2020-21

S.No.	Title of Project	Name of PI with Department	Company	Contract Value (Rs.)	Project Timelines (Start and End)
1.	Construction of Badminton Court Manshera	Prof. Dr. Muhammad Irshad	C&W Division Mansehra	200,000	26.08.2020
2.	Request for the Design of the Scheme "Strengthening and Establishment of fish hatcheries in Khyber Pakhtunkhwa Sh: Trout Hatchery in Mansehra	Prof. Dr. Muhammad Irshad	C&W Division Mansehra	500,000	26.08.2020
3.	Tehsil Building District Mansehra (Double Story)	Prof. Dr. Muhammad Irshad	C&W Division Mansehra	279,000	26.08.2020
4.	Tehsil Building District Mansehra (Double Story) (Revised Plan)	Prof. Dr. Muhammad Irshad	C&W Division Mansehra	200,000	26.08.2020
5.	Structural/ Architectural Design for the scheme SH: "Improvement/ Rehabilitation District Headquarter & Teaching Hospital in KPK SH: King Adullah Hospital	Prof. Dr. Muhammad Irshad	C&W Division Mansehra	270,000	26.08.2020
6.	Reconstruction of District Jail Swat ADP No. 606/140132/2019-20 Sh: Package No. 02 (Designing of Retaining Wall)	Prof. Dr. Muhammad Irshad	C&W Division Swat	3,788,000	26.08.2020
7.	Construction of Local Council Resource Center, Manshera	Prof. Dr. Muhammad Irshad	C&W Division, Mansehra	450,000	26.08.2020
8.	Vetting of Sturctural Design for the Project "Enchancement of Govt: Primary School No. 1 Tehkal Bala Peshawar	Prof. Dr. Muhammad Irshad	TMA, Town-1, Peshawar	150,000	26.08.2020
9.	Request for the Design of the scheme "Strengthening And Establishment of Fish Hatcheries In KPK Sh: Trout Hatchery in Dubair Kohistan Lower.	Prof. Dr. Muhammad Irshad	C&W Division Kohistan	500,000	26.08.2020

10.	Request For the Design of the Scheme " Strengthening and Establishment of Fish in KPK Sh: Trout Hatchery District Mansehra	Prof. Dr. Muhammad Irshad	C&W Division Kohistan	500,000	26.08.2020
11.	Detailed Planning and Design of Housing Scheme at Scheme at Dangram District Swat	Prof. Dr. Muhammad Irshad	Provincial Housing Authority ATI Campus Peshawar	4,700,000	23.09.2020
12.	Structure Strength/ Stability assessment of the existing Building of Peshawar General Hospital, Hayatabad Peshawar	Prof. Dr. Muhammad Irshad	PDA Hayatabad	2,500,000	11.11.2020
13.	Construction of Suspension Bridge (100M) at Thotti, Eleel, Tehsil Kandian, District Kohistan Upper (Pk-25)	Prof. Dr. Muhammad Irshad	C&W Sub Division Dassu	2,500,000	11.11.2020
14.	Construction of Food Grain Godowns (3000 Tons) in District Shangla	Prof. Dr. Muhammad Irshad	C&W Division Kohistan	250,000	11.11.2020
15.	Establishment of Shangla Sub Campus, University of Swat (Refurbishment/ Re-designing of Old building	Prof. Dr. Muhammad Irshad	Directorate of Works, University of Swat	350,000	11.11.2020
16.	Construction of Court Room at Pattan Kohistan Lower	Prof. Dr. Muhammad Irshad	C&W Sub Division Pattan Kohistan	150,000	11.11.2020
17.	Structure / Architectural Design for the Scheme Sh: Construction of Multipurpose hall at MDA Ground Township Mansehra District, KPK	Prof. Dr. Muhammad Irshad	Sub Divisional Officer (B-I) Building Division Mansehra	600,000	08.06.2021

# Innovation & Commercialization

## Trainings/Workshops/Seminars/Conferences arranged by other HEIs/National / International CB Partners on Research, Innovation, & Commercialization etc. - for Faculty, Researchers and Students

S.No.	Title of Training	Date of Event	Major Focus Area & Outcomes	Organizer	Audience Type (student / Faculty /researchers)
1.	Career Essentials	4.5.2021	Career Development, Resume Writing	Career Development Center UET Peshawar	Students
2.	Career Planning	8.5.2021	Career Development, Mock Interviews	Career Development Center UET Peshawar	Students
3.	Project Cycle Management for Officers of P & DD and line Department (Module-I, Batch I)	August, 10 -18,2020	Planning Machinery in Pakistan, Development Plans & Projects, Project Identification, Preparation of PC-II along with exercise, Estimation of area under cultivation of Irrigation Project (Exercise), Project Appraisal (Technical & Financial) etc	Continuing Engineering Education Center, UET Peshawar	Officers of P&DD, LG&RDD, STIT, Education Deptt, Energy & Power Deptt, E&S Education, Health Deptt, Mineral Dev Dept. Planning Officer, Social Welfare Department, Industries Department.
4.	Project Cycle Management for Officers of P & DD and line Department (Module-I, Batch II)	August 31 <sup>st</sup> to September 9 <sup>th</sup> ,2020	Planning Machinery in Pakistan, Development Plans & Projects, Project Identification, Preparation of PC-II along with exercise, Estimation of area under cultivation of Irrigation Project (Exercise), Project Appraisal (Technical & Financial) etc	Continuing Engineering Education Center, UET Peshawar	Officers of Social welfare department, "PLUP, Planning & Development, P&D Department KPK, Minerals Development Department, Local Government Deptt, Planning and Development Department, M&E System, P&D Department, Planning Cell, Food Department, Planning and development, SDGs Unit, SDU, "Auqaf, Hajj, Religious & Minority, Affairs Department", DG M&E ,P&D Dept, M&E System, P&D Department KP
5.	Project Cycle Management for Officers of P & DD and line Department (Module-II, Batch I)	21st to 25th Sep, 2020	Project Implementation, Post Project Approval Procedures, Project Implementation Plan, Structuring the Project Organization, Project Deliverables, Project Team Building, Preparation of Responsibility Matrix (Deliverable Based), Training of Project Staff & Project Phasing (PC-I Based)	Continuing Engineering Education Center, UET Peshawar	Officers of Social welfare department, "PLUP, Planning & Development, P&D Department KPK, Minerals Development Department, Local Government Deptt, Planning and Development Department, M&E System, P&D Department, Planning Cell, Food Department, Planning and development, SDGs Unit, SDU, "Auqaf, Hajj, Religious & Minority, Affairs Department", DG M& ,P&D Dept,M&E System, P&D Department KP

6.	Project Cycle Management for Officers of P & DD and line Department (Module-II, Batch II)	Sep 28th to Oct 02nd, 2020	Project Implementation, Post Project Approval Procedures, Project Implementation Plan, Structuring the Project Organization, Project Deliverables, Project Team Building, Preparation of Responsibility Matrix (Deliverable Based), Training of Project Staff & Project Phasing (PC-I Based)	Continuing Engineering Education Center, UET Peshawar	Officers of P&DD, LG&RDD, STIT, Education Deptt, Energy & Power Deptt, E&S Education, Health Deptt, Mineral Dev Dept. Planning Officer, Social Welfare Department, Industries Department.
7.	Basic Computer & IT Skill for P&DD Staff (BPS-17 and above” (Batch – I)	Nov 02 - 06, 2020	This Introductory level course teaches the key technique for using Microsoft Office & Computers Basics on day-to-day works in office	Continuing Engineering Education Center, UET Peshawar	Officers of P&DD, LG&RDD, STIT, Education Deptt, Energy & Power Deptt, E&S Education, Health Deptt, Mineral Dev Dept. Planning Officer, Social Welfare Department, Industries Department.
8.	Basic Computer & IT Skill for P&DD Staff (BPS-17 and above” (Batch – II)	Nov 09-13, 2020	This Introductory level course teaches the key technique for using Microsoft Office & Computers Basics on day-to-day works in office	Continuing Engineering Education Center, UET Peshawar	Officers of P&DD, LG&RDD, STIT, Education Deptt, Energy & Power Deptt, E&S Education, Health Deptt, Mineral Dev Dept. Planning Officer, Social Welfare Department, Industries Department.
9.	Introduction to Programmable Logic Controller (PLCs) and Human Machine Interfaces (HMI)	1st Dec, 2020	This course includes major topics of industrial automation including hardware and software architecture of PLCs as per IEC 61131-3 standard. In addition the course includes introduction to Human Machine Interface (HMI) and Supervisory Control Systems (SCADA)	Continuing Engineering Education Center, UET Peshawar	Fresh Graduates, Early and Mid-level Professionals
10.	WORKPLACE SAFETY & HAZARDS CONTROL & ASSESSMENT	30th Dec,2020	Effective safety programs and education on hazards prevention and control protect employees/workers from incidents and eliminate safety and health risks. It also helps employers to provide workers with safe and healthful working conditions.	Continuing Engineering Education Center, UET Peshawar	Fresh Graduates, Early and Mid-level Professionals
11.	Quality Control & Project Management Tools	31st Dec, 2020	Quality control is very crucial in project management. It leads the project management processes and activities which are based on planning, assurance and control. However, knowledge and expertise on use of effective tools are indispensable to allocate properly the human and financial resources, plan & schedule the activities and monitor the progress to meet the targets.	Continuing Engineering Education Center, UET Peshawar	Fresh Graduates, Early and Mid-level Professionals

# Innovation & Commercialization

12.	Audit Quality & Environmental Management System (aq&ems).	19th Feb, 2021	Introduction to integrated management system and compliance to ISO. Detailed description of auditing and ISO 9001:2015 and 14001:2015 standards. Knowledge of how to conduct an audit across the quality and environmental management system of an organization	Continuing Engineering Education Center, UET Peshawar	Fresh Graduates, Early and Mid-level Professionals
13.	Autodesk Building Information Modelling (BIM)	02nd to 04th March, 2021	Introduction to Building Information Modelling, its benefits and its uses in Civil and Infrastructure projects and relevant designs. Use of BIM software such as Autodesk Civil 3D, Revit, Navisworks etc. Knowledge of how use BIM360 for document, field and asset management to conduct an audit across the quality and environmental management system of an organization.	Continuing Engineering Education Center, UET Peshawar	Fresh Graduates, Early and Mid-level Professionals
14.	Potential of Renewable Energy HydroPower Development in KP, Opportunities and Challenges	March 24, 2021	Renewable energy	SDPI	Faculty, researcher , field experts , public and private sector representative
15.	Workshop on Open-source Robot Programming and Control	26.06.2021		UET Peshawar and National University of Computer & Emerging Sciences Peshawar Campus	Faculty, researcher , field experts , public and private sector representative
16.	Two days 5th online international conference on sustainability in process industry (SPI) 2020		proper utilization of indigenous resources for a sustainable future	Department of Chemical Engineering UET Peshawar and PASTIC	Faculty, researcher , field experts , public and private sector representative

## International Workshops / Trainings

S.No.	Title of Training	Date of Event	Major Focus Area & Outcomes	Organizer	Audience Type
1.	Research Based Career Planning and Pathway	29-May-21	Career Development, Resume Writing	Career Development Center UET Peshawar	Students / Faculty
2.	World Environment Day	June 5, 2021	Ecosystem	Green Growth Pakistan	Faculty, researcher, field experts, public and private sector representative
3.	Improved Water management, Distribution, and Pricing in Water-Scarce Environment	Aug, 31 2020 Sep, 18 2020	Water Management	US Department of State	Faculty

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

S.No.	Title of Training	Date of Event	Name and Details of ORIC Personnel Who Attended
1.	ORIC Research, Innovation and Commercialization activities and Role of Liaison Members	22.06.2021	Manager University Industry Linkages ORIC Manager Research and Development ORIC Manager Intellectual Property ORIC
2.	Four Day Annual Meeting and Conference	15 to 18 March 2021	Director ORIC Manager University Industry Linkages ORIC
3.	Information about Virtual workshop on using patent system by women inventors	01-02 June 2021	Manager Intellectual Property ORIC
4.	Importance of Intellectual Property Rights for Researchers	01-02 June 2021	Director ORIC Manager University Industry Linkages ORIC Manager Research and Development ORIC
5.	Two -Day International Training Workshop on Scientific Paper and Patent Writing	14-15 December 2020	Manager UIL ORIC

# 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 to support the university's vision of striving for the highest level of engineering excellence. In this regard, QEC is working closely with all stakeholder (internal and external) to for the fulfilment of its stated mission. QEC helps in implementation of the standard guidelines by Higher Education Commission (HEC) as well as the guidelines issued by the accreditation councils from time to time. QEC plays a leading role in ensuring the implementation of quality standards in the university. Some of the functionalities of QEC includes coordinating online course teacher evaluation at the end of each semester for undergraduate and postgraduate programs, collecting the required data for quality assessment, and supporting department in meeting the requirements of accreditation councils. QEC ensures the implementation of anti-plagiarism policies.

## Establishment of QEC

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

1. Director QEC
2. Deputy Director QEC
3. Data Analyst
4. Office Assistants
5. Naib Qasid

## Role of QEC

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 ten proformas that HEC 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 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 in the University

1. QEC implements stringent policies at MS and PhD level to guard against plagiarism. All MSc and PhD theses 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 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 AT reports and Rubric Form. The SAR's 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;
  - a) Plagiarism Policy
  - b) MSc/MS and PhD Criteria
  - c) Tenure Track System
  - d) Semester Guidelines
  - e) SOP's for Teachers, Batch Advisor, Chairman, Semester Coordinator, CMS operator etc.

## Internal Audit

The Quality Enhancement Cell at university acts as a focal point that holds the responsibility to ensure the implementation of standard procedures of HEC. It works with Quality Assurance Agency of Higher Education Commission (QAA/HEC) in the process of capacity building of academia, awareness workshop, training of teachers for preparing Self Assessment Reports (SARs) of the various teaching programs. Students, teachers and employees and other stake holders interest has 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 carried through institutional level evaluation and program level accreditation. Institutional Level Evaluation includes intuitional performance Evaluation, Campus Reviews, MS/M.Phil. Program Review and PhD program Review.

## Institution Performance Evaluation (IPE )

QEC coordinates between HEC and UET Peshawar for evaluation. Evaluation has been carried out by Institution Performa Evaluation (IPE) on the defined IPE standards. The institutional review process consists of university Portfolio Report and a team visit which look at the university critically. This university portfolio needs to be prepared before the visit of the IPE review panel. The eleven standards are

- ▶ 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 2020-21:

1. Internal Performance Evaluation (IPE) in February 2020.
2. MS/MPhil/PhD Review visit February 2020.
3. Statistical Data submitted to Pakistan Bureau of Statistic in January, 2020
4. National S & T Statistics: Data for UNESCO 2019 submitted to Pakistan Council for Science and Technology, Islamabad in January, 2020.
5. HEC Revised Statistical Data (2018-19) of UET Peshawar January, 2020.
6. HEC Statistical Data (Affiliated Colleges 2018-19) in February, 2020.
7. Teacher and Course Evaluation (Undergraduate & Postgraduate Programs) throughout the year.

## Accreditation of Programs

Accreditation / Re-accreditation of all UG programs of all programs are to be processed by Academic Operation through QEC. The following bodies carried out the evaluation of the programs of UET Peshawar.

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

The following programs are accredited by the relevant accreditation council.

1. Department of Industrial Engineering, Peshawar (PEC)
2. Department of Computer System Engineering, Peshawar (PEC)
3. Department of Chemical Engineering, Peshawar (PEC)
4. Department of Agricultural Engineering, Peshawar (PEC)
5. Department of Electrical Engineering, Peshawar (PEC)
6. Department of Mining Engineering, Peshawar (PEC)
7. Department of Mechanical Engineering, Peshawar (PEC)
8. Department of Civil Engineering, Peshawar (PEC)
9. Department of Computer Science and Information Technology, Peshawar (NCEAC)
10. Department of Mechatronics Engineering, Peshawar (PEC)

11. Department of Electrical Engineering, Kohat Campus (PEC)
12. Department of Electrical Engineering, Bannu Campus (PEC)
13. Department of Civil Engineering, Bannu Campus (PEC)
14. Department of Electronics Engineering, Abbottabad Campus (PEC)
15. Department of Architecture, Abbottabad Campus by (PCATP)
16. Department of Industrial Engineering, Jalozai Campus (PEC)
17. Department of Mechanical Engineering, Jalozai Campus (PEC)
18. Department of Electrical Engineering, Jalozai Campus (PEC)
19. Department of Civil Engineering, Jalozai Campus (PEC)

## Workshop/Seminar Organized

S.No	Title of the Event	Speaker (s)	Participation	Date
1.	Seminar on Improving Quality of Postgraduate Theses	<ol style="list-style-type: none"> <li>1. Dr. Naida Tahir, (Managing Director, QAA, HEC)</li> <li>2. Dr. M. Ahmad, (Ex-Director, QEC)</li> <li>3. Dr. Ishaq Ahmad, (Assistant Professor Mining Engineering)</li> <li>4. Mr. Dilnawaz, (Dy. Director, QEC)</li> </ol>	Deans, HODs, Secretary BOASAR, Director, Postgraduate Studies, Postgraduate Advisors, Program Team Members,	7th January, 2020
1.	Workshop on Improving Quality of Teaching in Engineering Education	<ol style="list-style-type: none"> <li>1. Prof. Dr. Irfan Mufti (Ex-Dean MCI)</li> <li>2. Prof. Dr. Sahar Noor (Dean MCI)</li> <li>3. Dr. Nasir Ahmad (Chairman DCSE)</li> <li>4. Dr. Sikander Bilal (Industrial Engg)</li> <li>5. Engr. Adnan Rasheed (Mechanical Engg)</li> </ol>	Vice Chancellor Deans HoDs Faculty Members	2nd October, 2021

## Membership of Director QEC in Various Committees:

1. Director QEC is Non-voting member of all the statutory bodies of UET Peshawar
2. Outcome Based Education Committee, UET Peshawar
3. Grievance Redressal Committee (GRC), UET Peshawar

## List of 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)

# University Professional Ranking

## CHAPTER 6

# University Professional Ranking by the HEC

The Quality Assurance Agency of HEC under the mandate to enhance the quality of education of all degree awarding institutions regularly assesses the quality of education through internal and external quality assurance mechanism. In this context, QAA performs regular visits to UET Peshawar for the assessment of academic degree programs at undergraduate and postgraduate levels. Moreover, keeping in line with Pakistan Engineering Council's requirements, UET Peshawar has got accreditation of its major academic programs under the Washington Accord's Outcome Based Education system. As per requirements of Pakistan Engineering Council (PEC), engineers registered with PEC under OBE will be considered at par as world-class competent professionals at international level.

## Times Higher Education (THE) Impact Ranking, 2022

UET Peshawar bags top rank in Khyber Pakhtunkhwa in SDG-17: Stands First in Pakistan under "Engineering and Technology" table in SDG-8

The University of Engineering and Technology, Peshawar has been ranked first in Khyber Pakhtunkhwa in the SDG-17, "Partnerships for Goals" in Overall table. For SDG 8, "Decent work for economic growth", UET Peshawar tops in Pakistan under "Engineering and Technology" table and second in the Overall table in the fourth edition of the Times Higher Education (THE) Impact Ranking, 2022. THE is the British publication that provides global higher education coverage in which the standings of universities are based on the assessment of the United Nations' Sustainable Development Goals and Universities' performance in four broader areas including research, stewardship, outreach, and teaching.

THE Impact Rankings demonstrates a university's commitment to deliver the UN SDGs, make it compulsory for member universities to have SDG 17 (Partnership for the Goals), for inclusion in the "overall" table. The Vice Chancellor Prof. Dr. Iftikhar Hussain congratulated the staff and faculty for securing the top place, said, UET Peshawar contested for this core SDG and secured outstanding place in the province, which is a matter of great pride, adding, developing meaningful partnerships with local industry, government and academia for the benefit for the society is the cornerstone of University's mission. He appreciated the efforts of ORIC and related offices for timely reporting to the THE Impact Rankings 2022.



# 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 are pursuing their Ph.D degree in word renowned universities.

S.No.	Scholar's Name	Department	Ph.D Research Title	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.	Majid Baseer	Industrial Engineering	Course work in progress	University of DE Lyon, France
4.	Unsia Habib1	Chemical Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
5.	Sajid Khan	Petroleum & Gas Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
6.	Mustafa Kamal	Chemical Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
7.	Farhad Ali	Petroleum & Gas Engineering	Course work in progress	University of Alberta, Canada
8.	Wajid Ali	Petroleum & Gas Engineering	Course work in progress	University of Alberta, Canada
9.	Shakir Azim	Industrial Engineering	Course work in progress	Ghent University, Belgium
10.	Muhammad Qasim	Industrial Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
11.	Hussan Khan	Civil Engineering	Course work in progress	University of Malaya, Malaysia (UTM)
12.	Azmat Ali Shah	Telecommunication Engineering	Course work in progress	Swinburne University of Technology, Australia

## Ph.D. Defenses

**Engr. Amir Naveed**, Department of Chemical Engineering, defended his Ph.D theses on 7th August, 2020. Prof. Dr. Saeed Gul, Department of Chemical Engineering is his Ph.D supervisor. The topic of his Ph.D theses was "Synthesis and Characterization of Geopolymeric Membrane for Forward Osmosis Application"

**Engr. Ahmed Khan**, Department of Computer Systems Engineering, defended his Ph.D theses on 5th October, 2020. Dr. Safdar Nawaz, Department of Computer Systems Engineering was his Ph.D supervisor. The topic of his Ph.D theses was "Resource management in mobile networks for machine-to-machine communication". He presented his research findings in a public seminar followed by Viva-Voce examination by the Examination Committee.

**Engr. Gulbadan Sikandar**, Department of Mechatronics Engineering, defended her Ph.D theses on 24th August, 2020. Dr. Shehzad Anwar, Department of Mechatronics Engineering was her Ph.D supervisor. The topic of her Ph.D theses was "Non-intrusive distinctive facial features based fatigue detection". She presented his research findings in a public seminar followed by Viva-Voce examination by the Examination Committee.

**Mr. Usman Ali Shah**, Department of Computer Science and Information Technology (CS&IT), defended his Ph.D theses on 9th October, 2020. Dr. Sohail Yousaf, Department of CS&IT was his Ph.D supervisor. The topic of his Ph.D theses was "Exploring GPU-friendly linear optimization methods". He presented his research findings in a public seminar followed by Viva-Voce examination by the Examination Committee.

**Mr. Muhammad Sohail Khan**, Department of Basic Sciences and Islamiat, defended his Ph.D theses on 22nd August, 2020. Dr. Rehan Ali Shah, Department of Basic Sciences and Islamiat was his Ph.D supervisor. The topic of his Ph.D theses was "A mathematical analysis of squeezing flow in magnetic field of variable intensity"

**Engr. Muhammad Masood Ahmed**, defended his thesis after completing his PhD research from the Department of Mechatronics Engineering, UET Peshawar on 11th November, 2020. The subject of his PhD thesis was "Vibration based hybrid bridge energy harvester for wireless sensor nodes". His Ph.D supervisor was Dr. Faridullah, Department of Mechatronics Engineering. Engr. Masood Ahmed is also serving as Associate Professor in the Department of Mechanical Engineering.

**Engr. Sania Gul** successfully defended her Ph.D from the Department of Electrical Engineering, UET Peshawar on January 19, 2021. Prof. Dr. Syed Waqar Shah, Chairman Department of Electrical Engineering was her Ph.D supervisor. The topic of her Ph.D thesis was "Spatial Cue Based Speech Separation, Dereverberation and Evaluation". She presented her research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee.

**Engr. Azmat Ullah**, Department of Civil Engineering, UET Peshawar successfully defended his Ph.D thesis on April 12, 2021. Prof. Dr. Khan Shahzada, Department of Civil Engineering was his Ph.D supervisor while Brig. Dr. Sarfaraz Ali, Ex-Dean, MCE Risalpur and Prof. Dr. Syed Muhammad Ali, Director Earthquake Engineering Center were his research Co-Supervisors while Prof. Dr. Shehzad Rehman and Dr. Sajjad Wali Khan, Associate Professor UET Jalozai Campus were also member of his REC. The topic of his Ph.D thesis was "Performance of dry stacked confined block masonry against blast loading". Engr. Azmat Ullah presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. Engr. Azmat ullah, currently serving as Deputy Director in the department of C&W, while he has published five (05) research papers in impact factor national and international journals. A large number of faculty and students were present on the occasion.

**Engr. Arbab Waseem Abbas**, Department of Computer Systems Engineering (DCSE) successfully defended his Ph.D thesis on May 6, 2021 in the Video Conference Hall, UET Peshawar. Dr. Safdar Nawaz Khan Marwat, Department of Computer Systems Engineering was his Ph.D supervisor. The topic of his Ph.D theses was "Cyber secured framework for control and monitoring of IoT devices in smart logistics". Engr. Waseem presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. Prof. Dr. Amjad Ullah, Dean Electrical, Prof. Dr. Laiq Hasan, Chairman DCSE, Dr. Samad Baseer, Director Clubs & Societies, faculty members and a large number of students were also present on the occasion.

**Engr. Muhammad Aslam**, Department of Electrical Engineering, University of Engineering and Technology, Peshawar successfully defended his Ph.D thesis on June 17, 2021. Prof. Dr. Muhammad Naeem Arbab, former Dean, Faculty of Electrical & Computer Engineering, UET Peshawar was his Ph.D supervisor. The topic of his Ph.D thesis was "Methodology for fault detection and health monitoring of power transformers" Engr. Aslam presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. Engr. Aslam is serving as a Lecturer in US-Pakistan Center for Advanced

Studies in Energy. Prof. Dr. Amjad Ullah, Dean, Faculty of Electrical and Computer Engineering and Prof. Dr. Syed Waqar Shah, Chairman Department of Electrical Engineering were also present on the occasion who congratulated Engr. Muhammad Aslam for his successful Ph.D defense.

**Engr. Ruhul Amin**, Lecturer Department of Electrical Engineering, UET Peshawar successfully defended his Ph.D thesis on June 14, 2021. Prof. Dr. Mohammad Inayatullah Khan Babar, Professor Department of Electrical Engineering (Vice Chancellor UET Taxila) was his Ph.D supervisor. The topic of his Ph.D thesis was “Location awareness in internet of underwater things (IoUT) using signal-of-opportunity approach”. Engr. Ruhul Amin presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. Engr. Ruhul Amin is serving as a Lecturer in the Department of Electrical Engineering; he has published 04 research papers in Impact factor journals of international repute. The REC members included Prof. Dr. Syed Riaz-ul-Hasnain, Department of Electronics Engineering, UET Abbottabad Campus, Dr. SM Majid Ashraf, Department of Electrical Engineering UET Peshawar, Dr. Sana-ul-Haq, Department of Electronics Engineering, University of Peshawar and Dr. Syed Muslim Shah, NESCOM, Islamabad.

**Engr. Ghasan Husnanin**, Department of Mechatronics Engineering successfully defended his Ph.D on June 24, 2021 in the video conference hall UET Peshawar. Dr. Shehzad Anwar, Department of Mechatronics Engineering was his Ph.D supervisor. The topic of his Ph.D research was “Bio inspired intelligent routing scheme for clustering in vehicular Ad-Hoc networking (Vanets)”. Engr. Ghasan presented his research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. He is also serving as Lecturer at the Department of Mechatronics Engineering.

**Engr. Muniba Afaq**, Department of Computer Systems Engineering successfully defended her Ph.D thesis on February 27, 2021. Dr. Nasru Minallah, Department of Computer Systems Engineering was her Ph.D supervisor. The topic of her Ph.D thesis was “Retrospective image registration for medical image analysis and diagnosis”. Engr. Muniba presented her research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee. She is also serving as Lecture at the Department of Computer Systems Engineering, UET Peshawar.

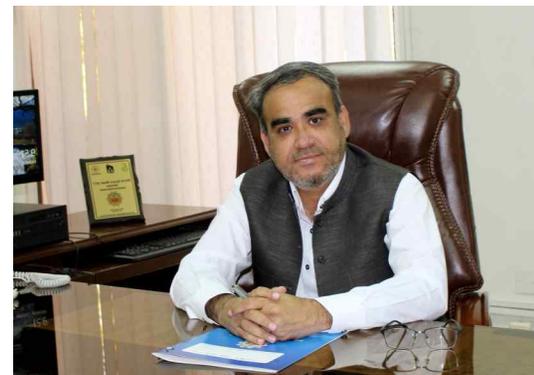
**Engr. Abdul Basit, and Engr. Nasir Saleem** completed their Ph.D from the Department of Electrical Engineering and successfully defended on May 21, 2021 at the Video Conference Hall, UET Peshawar. Dr. Muhamamd Irfan Khattak, Department of Electrical Engineering was their Ph.D supervisor. Their REC included Prof. Dr. Amjad Ullah, Dean Faculty of Electrical Engineering, Dr. Gulzar Ahmad, Department of Electrical Engineering, Dr. Yousaf Khan, Coordinator Kohat Campus, Dr. Faiz Ahmed and Dr. Muhammad Luqman. They presented her research findings through a seminar in public forum session, followed by Viva-Voce examination by the Examination Committee.

# Faculty Development

## Prof. Dr. Amjad Ullah Takes Charge as Dean, Faculty Electrical & Computer Engineering

Prof. Dr. Amjad Ullah has been appointed the Dean, Faculty of Electrical and Computer Engineering for three years with effect from 16th October 2020 with the approval of Honorable Governor/Chancellor, KP and through Notification No. SO (U-1) HE/2-3/Dean/2020 issued by the Higher Education Archives and Library Department, Government of Khyber Pakhtunkhwa. He took charge as Dean, Faculty of Electrical and Computer Engineering on Monday.

Expressing his views Prof. Dr. Amjad Ullah said that he would work for the benefit of the students, faculty and administration. He also thanked the Governor Khyber Pakhtunkhwa, Higher Education Department Government of Khyber Pakhtunkhwa for showing confidence in his capabilities. Dr. Amjad Ullah completed his Master's in Computer Security from George Washington University, USA in 2002 and joined his Alma Mater. Prof. Dr. Amjad Ullah completed his Ph.D. in Electrical Engineering (Power) from UET Peshawar in 2004 and became Professor in 2014. Earlier, he also served as Chairman Electrical Engineering Department, UET Peshawar, and Coordinator UET Kohat campus for more than three years. He has also remained as a member Board of Directors of PESCO Peshawar from 2013 to 2017.



## Prof. Dr. Akhtar Naeem Khan, Honored for Recognition of his Services to UET Peshawar

Prof. Dr. Qaisar Ali, Pro-Vice-Chancellor and Prof. Dr. M.A Irfan, Senior Dean, Faculty of Mechanical, Chemical and Industrial Engineering honored Prof. Dr. Akhtar Naeem Khan, Dean, Faculty of Civil, Agricultural and Mining Engineering for recognition of his services to UET Peshawar, and for achieving excellence in the field of civil engineering and technology on December 3rd, 2020. On the occasion senior faculty members and Deans were present including Prof. Dr.



Waqar Shah, Dean Faculty of Electrical Engineering, Prof. Dr. Siraj ul Islam, Dean Basic Sciences, Prof. Dr. Hamid Ullah Director Undergraduate Studies, Prof. Dr. Imran Director QEC, Dr Misbah Ullah Treasurer, Haroon Khan Registrar and Dr Shamaila Farooq, Director Media. Dr Irfan presented the shield on behalf of the Deans of UET Peshawar during the Deans Committee meeting held here today. Prof. Dr. Akhtar Naeem Khan said, UET Peshawar nurtured the holistic self of its faculty and students more than the typical teaching. May the Almighty Allah be the protector of its milieu. He reiterated to continue demonstrating his commitment to lifelong learning and service to the university.

## **Prof. Dr. Sahar Noor takes Charge as Dean, Faculty Mechanical, Chemical & Industrial Engineering**

Prof. Dr. Sahar Noor has been appointed the Dean, Faculty of Mechanical, Chemical and Industrial Engineering of UET Peshawar for a period of three years with the approval of Honorable Governor/Chancellor KP through a notification issued by the Higher Education Archives and Library Department, Government of Khyber Pakhtunkhwa.

Dr. Sahar Noor completed his Master's in Metallurgical Engineering in 1996 from the Institute of Material Science & Research, Pakistan Steel Karachi. He completed his Ph.D in Mechanical Engineering from University of Bradford, UK in 2007 and became Professor in 2010 at the Department of Industrial Engineering. Earlier, he also served as Chairman Industrial Engineering Department, UET Peshawar for more than four years. Currently, Dr. Sahar Noor is also serving as Provost, UET Peshawar while he has also served as the Director QEC, Secretary Board of Advanced Studies and Research (BOASAR), Postgraduate Advisor and Chairman Department of Chemical Engineering, UET Peshawar.

Expressing his views, Dr. Sahar Noor said that he would work for the benefits of students, faculty, and administration. He also thanked the Governor Khyber Pakhtunkhwa, Higher Education Department Government of Khyber Pakhtunkhwa for showing confidence in his capabilities.



## **Prof. Dr. MA irfan Awarded Association of Energy Engineers 2021 Regional Award**

Prof. Dr. Mohammad Abdul Aziz Irfan, Former senior Dean / Professor Department of Mechanical Engineering, UET Peshawar has been awarded the Association of Energy Engineers AEE's 2021 Regional Award under the "Asia Subcontinent Region". Prof. Dr. Irfan has played a pioneering role in promoting the concept of energy efficiency in Pakistan. He was conferred with the award in recognition of his services in the category, "energy professional development". Prof. Dr. Irfan introduced the courses of Energy Efficiency and Energy Audits. He has established "Center for Industrial and Building Energy Audits." at UET Peshawar. Besides energy audits, the Center caters for Human Resource Development and has developed the first database of industrial energy consumption in Pakistan. He is a Certified Energy Manager (CEM) as well as a certified trainer for CEM in Pakistan.

The AEE is a non-profitable professional association of over 180000 members from across the world. This year AEE awarded 80 professionals in recognition of their dedicated efforts towards energy efficiency in their local settings.



## **Dr. Naveed Ahmad got Fulbright Postdoctoral at Stanford University, USA.**

Dr. Naveed Ahmad got Fulbright Postdoctoral at Stanford University, USA. Dr. Naveed Ahmad (Associate Professor, Department of Civil Engineering) won postdoctoral research position under the prestigious USEFP Fulbright Scholar 2021/2022 program, funded by the US Department of State. USEFP awards 15 grants every year to sponsor 13 junior and 02 senior scholars from Pakistan in several fields. Dr. Naveed has the honor of being selected in the senior scholar category. Dr. Naveed is appointed at Stanford University in the Department of Civil & Environmental Engineering in the School of Engineering to conduct research in the field of structural and earthquake engineering.



# Students Enrollment & Degrees Awarded Annually

## CHAPTER 8

# Students' Enrollment & Degrees Awarded Annually

Basic Enrolment (Gender-Wise) 2020-21								
B.Sc.			M.Sc.			Ph.D.		
Male	Female	Total	Male	Female	Total	Male	Female	Total
1272	119	1391	523	37	560	53	08	61

Degrees Awarded, Peshawar (Main Campus) B.Sc.		2020-21
S.No.	Department	No. of Degrees
1	Agricultural Engineering	38
2	Civil Engineering	423
3	Chemical Engineering	180
4	Computer Systems Engineering	199
5	Electrical Engineering	100
6	Industrial Engineering	101
7	Mechanical Engineering	371
8	Mining Engineering	50
9	Mechatronics Engineering	94
10	Computer Sciences & IT	90
<b>Total</b>		<b>1646</b>

# Students Enrollment & Degrees Awarded Annually

Degrees Awarded Satellite Campuses and Affiliated Colleges (B.Sc.)			2020-21
Campus	Department		No. of Degrees
<b>Kohat Campus</b>			
	1	Electrical Engineering	101
<b>Bannu Campus</b>			
	1	Civil Engineering	178
	2	Electrical Engineering	100
<b>Abbottabad Campus</b>			
	1	Electronics Engineering	94
	2	Architecture	91
<b>Jalozai Campus</b>			
	1	Civil Engineering	166
	2	Mechanical Engineering	173
	3	Electrical Engineering	134
<b>Mardan Campus (UET Mardan now)</b>			
	1	Electrical Engineering	174
	2	Telecom Engineering	116
	3	Software Engineering	113
<b>Degrees Awarded (M.Sc. &amp; Ph.D)</b>			<b>2020-21</b>
	1	M.Sc.	280
	2	Ph.D.	19

# Strengthening Physical Infrastructure

## CHAPTER 9

# Strengthening Physical Infrastructure

## Development Projects (on-going)

### ESTABLISHMENT OF JALOZAI CAMPUS

Location:	At kilometer 11 on Pabbi-Cherat Road, Jalozai, District Nowshera,
Date of Approval of RPC-1	May 2020
Extended Date of Completion:	June 2022
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>Revised PC-1 Cost:</b>	Rs. 6535.325 Million
Total area of the Campus	402 acre
Total Covered area	1,021,233 sq
Live-in strength:	1200 students
HRD Component:	95 Nos. Overseas MS/PhD scholarships

#### Objectives

- ▶ Construct one million square feet of building area to house University infrastructure.
- ▶ Establishment of five (5) Engineering Departments at Undergraduate and Postgraduate level.
- ▶ Train 95 faculty members to obtain PhD Degrees (Overseas) as HRD program.
- ▶ Increase the student enrollment by 2000
- ▶ Improve quality of education and increase relevance to the national needs by developing and funding research facilities for faculty.

at Jalozai Campus, 05 Nos. Disciplines including Civil Engineering, Electrical Engineering, Mechanical Engineering, Industrial Engineering and Computer Science & Information Technology 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

- ▶ 4 Nos. Academic Buildings alongwith separate buildings for modern and well-equipped laboratories, annexed with the main buildings, are completed and occupied by UET Peshawar.
- ▶ 3 Nos. Hostels with a capacity to accommodate 210 students each, with spacious buildings encompassing basic facilities, are completed and taken over by UET Peshawar.

#### Infrastructures Package I

(i) Roads and Walkways	Completed
(ii) Water supply	Completed
(iii) Sewerage	Completed
(iv) Boundary wall	98% 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) External Sui Gas Supply Works	Completed
(iv) Construction of Promenade	near completion 90% completed & about to hand over
(v) Construction of 52 Nos. Faculty & Staff Residences	3 Completed & hand over under 4th one shall be completed by 30 June 2022
(vi) Construction of 04 Nos. Student Hostels	Under construction and scheduled to be completed upto July 05, 2019

#### Status of Human Resource Development

So far, 83 Nos. scholars have been sent abroad to different Universities of USA, UK and other European countries, out of which 63 scholars have joined the

# Strengthening Physical Infrastructure

University after completing their MS/PhD studies. Moreover, 22 Nos. Scholars have been selected recently for award of Overseas Scholarships Rs. 856.580million has been incurred upon HRD component till date;

## Status of Lab-equipments

Lab equipment procured under 1st Consignment/Lot for Mechanical, Industrial and Electrical Engineering Departments at the Jalozai Campus of University of Engineering & Technology, Peshawar have been imported from various technological advanced countries and all lab equipment procured for the Campus have been properly installed, tested and commissioned by the Suppliers at their respective labs.

## Academics

- ▶ The Campus has been inaugurated by the Governor and Chief Minister KPK on December 14, 2015.
- ▶ Regular Classes of 1120 students under Civil, Electrical, Industrial, Mechanical Engineering and CS&IT Departments are being held at Jalozai Campus.
- ▶ Three Hostels are functional and the students have been accommodated in the Hostels.

The project Jalozai Campus of UET, Peshawar was revised by CDWP in its meeting held 19th May 2020 for a total cost of Rs .6535.325 million. The updated component-wise allocation and expenditures are as under.

Allocation and Expenditure <sup>(Updated)</sup> Rs. in million		
Component	Allocation	Expenditure
Civil Work	2016.68	1597.472
External Development	1286.22	1036.773
HRD	1080.00	874.197
Equipment for Labs./Teaching Aids	1807.20	1998.656
Furniture	92.61	111.149
Books & Journals	60.00	31.204
Transport	54.37	54.369
Salaries	78.24	68.885
Misc/Contingency	60.00	52.488
<b>Total amount in Million</b>	<b>6535.315</b>	<b>5825.193</b>

*Plus Escalation paid of 117.329*



# Strengthening Physical Infrastructure

## 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 has been allocated as PSDP allocation for the FY 2020-21, against which no release has been made as yet. Component wise allocation of the project is as under:

Component (s)	Budget	Exp	F.E.C.	Balance
Civil works	824.17	3.941	-	820.2286
Lab.Equip & Teaching Aid etc.	190.65	15.474	350.000	525.1756
Books/ Journals	8	-	-	5.620974
Furniture/ Fixture	33.513	-	-	33.513
Transport/Logistics	21.845	2.379	-	0.510175
ICT Services for the campus	35.282	21.335	-	35.282
Misc. @1.5% of the Capital cost	22.5	1.236	-	21.26378
Salaries	14.04	3.925	-	10.11474
<b>Total Amount in Million (PKRs.)</b>	<b>1150</b>	<b>48.291</b>	<b>350.000</b>	<b>1451.709</b>



## ESTABLISHMENT OF SUB-CAMPUS AT DIR (UPPER):

The project was approved by PDWP, HED KP in its meeting held on 15th September 2017 for a total cost of Rs.2019.699 million. Till date an amount of Rs.250.00 million has been released by HED, KPK, against which an interim amount of Rs.125.00 million has been paid to DC Dir (Upper) for acquisition of land for the proposed campus. The overall component wise allocation and expenditure are as under:

Component (s)	Total (Rs. in million)	Progress/ Expenditures
Land		125.000
Bridge		—
Civil works		—
Land development/ Road & Drainage Network		—
Electricity & Telephone Exchange		—
Electrical Engineering Department Equipment		—
Civil Engineering Department		—
Basic Sciences, Computer Labs & Teaching Aid		—
Furniture/Fixture		—
Networking		—
Books/Journals		—
Transport		—
Salaries of Project Staff		—
Supervision @2.5%		—
Miscellaneous		3.073
<b>Grand Total in Million Rs.</b>	<b>2019.699</b>	<b>128.073</b>

# 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

The Smart Education is a concept that transforms conventional way of pedagogy to contemporary methods using information and communication technologies. The concept has been realized as to leverage on and complement the initiative of Government of Pakistan on the directives that half a million (i.e. 500,000) laptop/computers are being used by the students across the country particularly in Higher Educations Institutions. These laptops/ computers will helping students in their learning activities within and outside the classrooms through the Touch-screen/ Tablet feature of these devices.

Moreover, for ubiquitous computing UET Peshawar with the help of Higher Education Commission (HEC) has taken the initiative of Smart Campuses under which blanket WiFi coverage is being provided as to complement the initiative of Smart Bags, i.e. Laptop (2-in-1 detachable) computers. This initiative engaging students with digital generation, improving individualized learning opportunities, sparking innovation in learning, enhancing teachers' digital pedagogy. The installation of the smart campus infrastructure is at full pledge momentum and hopefully in the next couple of months the university students, faculty and administration will get this techno facilitation.

### 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,

## Online Admissions

and interacting with other academics partners across the globe. Videoconferencing is already well established with a growing number of educational centers all over 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

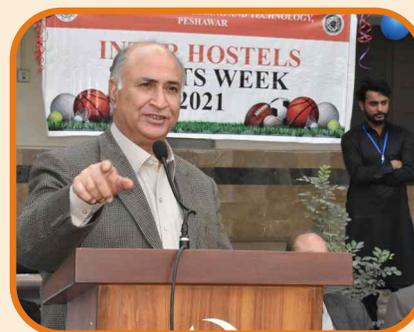
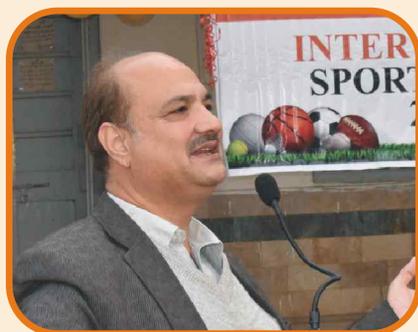
## Inter-Departmental Sports

## Inter-Hostels Sports Week 2021

The “Inter-Hostels Sports Week 2021” (male & female) was held from 30th November to December 7, 2021 at UET Peshawar. The chief guest of the opening ceremony was Prof. Dr. Iftikhar Hussain, Vice Chancellor, UET Peshawar which was held at Hostel 8. The Sports Week was organized by Dr. Afzal Khan, Provost in collaboration with the Directorate of Sports. In Sports Week, various teams of students living in hostels took part in lawn tennis, badminton, futsal, cricket, volleyball, basketball and indoor games.

The Vice Chancellor Prof. Dr. Iftikhar Hussain and Senior Dean Prof. Dr. Sahar Noor on the occasion of opening ceremony said that UET is committed to provide all possible facilities to the students in the university and hostels within its limited resources. They urged the students to take full advantage of such opportunities and participate in sports competitions as games are an important part of our lives which enhances the extraordinary abilities of character and physical abilities and thereby strengthens the mental development. They paid tributes to Provost for organizing Inter-Hostels Sports Week and urged them to continue organizing sports competitions in future as sports along with studies is essential for the mental and physical development of students.

Provost Prof. Dr. Afzal Khan on the occasion thanked the University Administration and Director Sports Muhammad Ali for their support and appreciated the efforts of the organizers for the best arrangements. He said, as provost he has always strived to provide full opportunities to the students to participate in sports as well as study in hostels besides other facilities.



The prize distribution ceremony of “Inter Hostels Sports Week 2021” (male and female) was held at the Mian Hall on December 13, 2021. The Chief Guest of the ceremony was Prof. Dr. Sahar Noor, Senior Dean who distributed awards and shields among the winners and the organizers.

## DCSE Intra-Department Sports Tournament 2021

The Department of Computer Systems Engineering organized “Intra-Department Sports Tournament 2021” held from November 22 to 24, 2021. Prof. Dr. Iftikhar Hussain, Vice Chancellor was the chief guest in the opening ceremony who also addressed the participating teams. Sports incharge DCSE Mr. Dr. Imad said that different sports competitions were held among the four batches of Computer Systems Engineering. The Vice Chancellor appreciated the efforts of Dr. Nasir Ahmed, Chairman DCSE and Mr. Muhammad Ali, Director Sports for organizing such activities for the youth. The Vice Chancellor in his opening remarks urged the participating teams to demonstrate discipline and sportsman spirit during competitions.



## UET Participated in Kamyab Jawan Sports Drive 2021

UET Peshawar different teams (male & female) including Athletics, Squash, Lawn Tennis and Hand Ball etc participated in the "Kamyab Jawan Sports Drive 2021", organized by different universities under the auspices of “Higher Education Commission, (Pakistan Universities Sports Board), held at Jinnah Stadium, Islamabad. The teams were supervised by the Director Sports Mr. Muhammad Ali. In Lawn Tennis (Men), UET team including Ahmed Shafi, Usman and Jehanzeb grabbed 3rd position in all Pakistan Inter-Universities. Other teams from UET warmly participated in the various games competitions. Prof. Dr. Iftikhar Hussain, Chancellor UET and Prof. Dr. Sahar Noor, Senior/Chairman Sports Committee congratulated the winning teams and appreciated the efforts of Director Sports.



# Finance

## CHAPTER 12

## Actual (Revised Estimates) 2020-21 & Budget Estimates 2021-22 Consolidated Summary of Income & Expenditure

Rs. in million)

Particulars	Actual for 2019-20	Budget Estimates 2020-21	Revised/Actual Estimates 2020-21			Budget Estimates 2021-22
			Actual July, 2020 to March, 2021	Actual April 2021 to June, 2021	(Total for 2020-21 (Col: 4+5)	
1	2	3	4	5	6	7
<b>A) INCOME</b>						
<b>I. HEC Grants</b>						
i. Annual Grant	755.789	832.873	666.298	166.575	<b>832.873</b>	850.000
ii. Supplementary Grants :	–	–	–	–	–	–
a. Additional Grant for Budgetary	10.000	0.000	10.000	0.000	<b>10.000</b>	0.000
b. Grant for Budgetary Support.(Covid-19)	75.579	0.000	0.000	45.234	<b>45.234</b>	0.000
c. Additional Grant	–	–	–	292.000	<b>292.000</b>	0.000
<b>Sub Total HEC Supplementary Grant:</b>	<b>85.579</b>	<b>0.000</b>	<b>10.000</b>	<b>337.234</b>	<b>347.234</b>	<b>0.000</b>
<b>Total HEC Grant</b>	<b>841.368</b>	<b>832.873</b>	<b>676.298</b>	<b>503.809</b>	<b>1,180.107</b>	<b>850.000</b>
<b>II. Own Income</b>						
a. Regular Fee Income	183.438	293.765	126.771	34.724	<b>161.495</b>	311.902
b. Self Sustained/Support Income	50.598	68.737	62.835	4.225	<b>67.060</b>	40.505
c. Non-Subsidized/Self Finance Income	342.070	432.948	193.803	114.962	<b>308.765</b>	489.095
d. Other Sources (Miscellaneous Income)	179.098	515.588	256.942	71.781	<b>328.723</b>	377.347
<b>Sub Total Own Income:</b>	<b>755.204</b>	<b>1,311.038</b>	<b>640.351</b>	<b>225.692</b>	<b>866.043</b>	<b>1,218.849</b>
<b>Total Resources (A):</b>	<b>1,596.572</b>	<b>2,143.911</b>	<b>1,316.649</b>	<b>729.501</b>	<b>2,046.150</b>	<b>2,068.849</b>
<b>B) EXPENDITURE</b>						
a. Pay and Allowances	1323.804	1577.958	930.204	379.243	<b>1,309.447</b>	1522.812
b. Other Charges	630.134	770.800	503.505	166.211	<b>669.716</b>	807.037
<b>Total Expenditure (B):</b>	<b>1,953.938</b>	<b>2,348.758</b>	<b>1,433.709</b>	<b>545.454</b>	<b>1,979.163</b>	<b>2,329.849</b>
<b>C) CLOSING BALANCE CURRENT YEAR (A-B)</b>	<b>(357.366)</b>	<b>(204.847)</b>	<b>(117.060)</b>	<b>184.047</b>	<b>66.987</b>	<b>(261.000)</b>
<b>D) CLOSING BALANCE (PREVIOUS YEAR)</b>	<b>(441.866)</b>	<b>(799.231)</b>	<b>(799.232)</b>	–	<b>(799.232)</b>	<b>(732.245)</b>
<b>TOTAL BALANCE</b>	<b>(799.232)</b>	<b>(1,004.078)</b>	<b>(916.292)</b>	<b>184.047</b>	<b>(732.245)</b>	<b>(993.245)</b>

## Financial year 2020-21 at a Glance

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

Particulars	Rs. in million		Amount in Rs.
	Approved Budget for CFY 2020-21 Year Total	Receipts & Expenses 2021-21 Current Quarter	Cumulative Total
<b>1. Opening Balance</b>	<b>(799.231)</b>	<b>(916,292,256.51)</b>	<b>(799,231,992.49)</b>
<b>2. Total Grants &amp; Donations (a - f)</b>	<b>832.873</b>	<b>503,808,600</b>	<b>1,180,107,000</b>
a. Federal Government (Annual)	832.873	166,574,600	832,873,000
b. Supplementary / Additional Grant:	–	337,234,000	347,234,000
I. Special Additional Grant	–	–	–
ii. Increase in Pay & Allowances (05 & 10%)	–	–	–
iii. Increase in Pension 10%	–	–	–
iv. Revision in Rental Ceiling @ 50%	–	–	–
c. Grant for Tenure Track Faculty	–	–	–
d. Provincial Govt. Grant	–	–	–
e. Donations	–	–	–
<b>3. Total Own Resources</b>	<b>1,311.038</b>	<b>225,690,285</b>	<b>866,040,740</b>
<b>3 (i) Students Related Income [3(i)a – 3(i)d]</b>	<b>1,166.418</b>	<b>219,724,827.00</b>	<b>790,448,835.06</b>
Tuition Fees	568.673	22,369,850	470,182,400
Other Charges	539.977	196,512,228	282,602,712
Hostel Charges etc.	51.768	683,239	33,682,893
<b>a. On Campus Students (Sub-Total)</b>	<b>1,160.418</b>	<b>219,565,317.00</b>	<b>786,468,005.06</b>
b. Affiliated College/Institutions' Students	6.000	159,510	3,980,830
c. External (Private) Students	–	–	–
<b>3 (ii). Other Venues of Income [3(ii)a – 3(ii)f]</b>	<b>144.620</b>	<b>5,965,458</b>	<b>75,591,905</b>
a. Income from Collaborative and Contract Research	–	–	–
b. Income from Consultancy & Testing	32.000	5,382,588	31,649,709
c. Income from Intellectual Property	–	–	–
d. Income from Regeneration & Development Programs	–	–	–
e. Alumni	–	–	–
f. Any Other Income	112.620	582,870	43,942,196
<b>3 (iii) Endowments</b>			
<b>A. Total Available Resources [1+2+3]</b>	<b>1344.680</b>	<b>(186,793,372)</b>	<b>1,246,915,747.34</b>
<b>4 (i). Expenditure from Federal Government Grant</b>	<b>1,300.408</b>	<b>503,808,600</b>	<b>1,180,107,000</b>
a. Faculty Salary	757.983	155,020,450	492,301,640
b. Salary of Officers & Staff -Teaching Departments	30.000	27,887,254	49,751,819
c. Salary of Officers & staff -Non-Teaching Departments	120.000	135,629,081	402,182,722
d. TTS Faculty Salary/ Gratuity	100.425	60,709,206	60,709,206
e. Other Establishment Charges	–	–	–
f. Non Salary Expenses / Other Charges (Library Exp)	250.000	124,562,608	175,161,613
g. Research	6.000	–	–
h. Need Based Scholarships	36.000	–	–

Particulars	Rs. in million		Amount in Rs.
	Approved Budget for CFY 2018-19 Year Total	Receipts & Expenses 2018-19 Current Quarter	Cumulative Total
<b>4 (ii). Expenditure from Own Income (All Resources)</b>	<b>1,048.800</b>	<b>41,642,986</b>	<b>799,053,705</b>
a. Faculty Salary	300.000	–	117,890,955
b. Salary of Officers & Staff -Teaching Departments	120.000	–	60,000,000
c. Salary of Officers & staff -Non-Teaching Departments	150.000	–	126,610,469
d. TTS Faculty Salary/ Gratuity		–	–
e. Other Establishment Charges		–	–
f. Non Salary Expenses / Other Charges	478.800	41,642,986	494,552,281
g. Research			
<b>5. Total Establishment Charges [4 (i) a-e + 4 (ii) a-e]</b>	<b>1,578.408</b>	<b>379,245,992</b>	<b>1,309,446,811</b>
<b>6. Total Non Salary Expenses [4 (i) f-g + 4 (ii) f-h]</b>	<b>770.800</b>	<b>166,205,594</b>	<b>669,713,894</b>
<b>B. Total Expenditures [ 5 + 6 ]</b>	<b>2,349.208</b>	<b>545,451,586</b>	<b>1,979,160,705.26</b>
<b>C. Surplus / Deficit [A - B]</b>	<b>(1,004.528)</b>	<b>(732,244,957.92)</b>	<b>(732,244,957.92)</b>

## Statement of Accounts as on 30.06.2021

Particulars	Amount	Particulars	Amount
Opening Balance	(799,231,992.49)	Advance	36,228,406.91
Grant	1,180,107,000.00	Balance as per Bank Book	129,485,915.51
Receipt	866,040,739.83	Receivable	43,416,408.00
<b>Total</b>	<b>1,246,915,747.34</b>		
Less Expenses			
Other Expenditure	669,713,892.92		
Pay & Allowances	1,309,446,811.00		
<b>Total</b>	<b>1,979,160,703.92</b>		
Closing Balance	(732,244,956.58)		
Liabilities	941,375,687.00		
<b>Total</b>	<b>209,130,730.42</b>	<b>Total</b>	<b>209,130,730.42</b>

# Funds Generation / Development

## CHAPTER 13

# Funds Generation / Development

Endowment Fund Project		
S.No.	Description	Amount (Rs. in million)
A	Income/Receipt	441.604
B	Less Expenditure	63.111
C	<b>Balance (A-B)</b>	<b>378.493</b>
D	Investment	370.000
E	<b>Net Cash Balance as per book (C-D)</b>	<b>8.493</b>

Faculty Research and Commercialization Portfolio		
S.No.	Description	Amount (Rs. in million)
1.	Research Proposals approved for funding by HEC.	375.74
2.	Research Proposals approved for funding by Non-HEC.	85.21
	<b>TOTAL</b>	<b>460.96</b>

Developmental Budget		
S.No.	Project	Amount (Rs. in million)
1.	Jalozai Campus (Revised)	6535.325
2.	Strengthening of Abbottabad Campus	1500.000
3.	Establishment of Sub-Campus of UET Dir (Upper)	2019.699
	<b>TOTAL</b>	<b>10055.02</b>

Consultancy Services		
S.No.	Description	Amount (Rs. in million)
1.	UET Consultancies for various projects	<b>30.56</b>

# University Liaison with Industry

## CHAPTER 14

# University Liaison with Industry

## Department of Civil Engineering

The department is actively involved in collaboration with academia and industrial on different levels. In that context, there are various MOUs signed with various organization and departments. Details of the said MOUS are provided below.

- ▶ Lahore University of Management Sciences (LUMS)
- ▶ Irrigation Department KPK.
- ▶ ETA Consultants.
- ▶ CAMEOS Consultants.
- ▶ PAVRON Consultants.
- ▶ P & D Khyber Pakhtunkhwa.
- ▶ NESPAK Consultants
- ▶ YIC (youth International Conceive)

## Department of Industrial Engineering

- ▶ Thirty students of Department of Industrial Engineering were offered internships in different oil and gas, textile, sports, manufacturing and service sectors.
- ▶ A joint research project started in collaboration with Paraplegics Center Peshawar for the research and development of assistive devices used in physical rehabilitation of people with disabilities.

## Department of Computer Systems Engineering

- ▶ Foster Learning Pakistan
- ▶ Vodafone Global Enterprise, Germany
- ▶ Naseeb Online Services (Pvt.) Limited

## Center for Advanced Steadies in Energy (CAS-E)

- ▶ Collaborations with University of Cambridge by doing a joint project titled “Investigating factors affecting socio-technical integration of Micro-Hydro Power projects in Khyber Pakhtunkhwa, Pakistan”.
- ▶ Collaborations with Keele University, UK, and University of the Punjab, Pakistan by doing a joint project on “Clean cooking and electricity through E-Stove in Pakistan”.

# Recruitments & Promotions

## CHAPTER 15

# Recruitments & Promotions

## 2020-21

S. No	Name of Post	Number
1.	Promotion of Assistant Librarian (BPS-16) to (BPS-17)	04
2.	Promotion of Office Assistant (BPS-16) to Office Superintendent (BPS-17)	12
3.	Promotion of Sub Engineer (BPS-16) to Assistant Engineer (BPS-17)	01
4.	Promotion of Assistant Accountant (BPS-16) to Assistant Accounts Officer (BPS-17)	01
5.	Up gradation of Auto Mechanic from BPS-16 to BPS-17	01
6.	Up gradation of Lab Technician from BPS-16 to BPS-17	01
7.	Appointment of Professor (BPS-21)	02
8.	Upgradation of Individual Hardship case from BPS-18 to BPS-19	01
9.	Promotion of Deputy Director (S&C) (BPS-18) to Additional Director Accounts (BPS-19)	01
10.	Promotion of Deputy Director works (BPS-18 to Additional Director of Works (BPS-19)	01
11.	Appointment of Computer Programmer (BPS-17), Directorate of Admissions	01
12.	Appointment of Professor (BPS-21)	02
13.	Appointment of Manager Network Operation (BPS-17)	01
14.	Appointment of Lecturer (BPS-18)	04
15.	Appointment of Lecturer (BPS-18)	03
16.	Appointment of Lab Engineer (BPS-17)	05
17.	Appointment of Lecturer (BPS-18)	04
18.	Assistant Professor TTS	01
19.	Assistant Professor TTS	01
20.	Assistant Professor TTS	01
21.	Assistant Professor	01
22.	Appointment of Senior Computer Technologist (BPS-17)	01
23.	Appointment of Project Director Abbottabad	01
24.	Appointment of Lecturer (BPS-18)	01
25.	Appointment of Lab Engineer (BPS-17)	01
26.	Appointment of Lab Engineer (BPS-17)	01
27.	Appointment of Site Engineer (PPS-17)	01

# Recruitment & Promotions

2020-21

28	Appointment of Junior Developer (BPS-17) (Contract)	01
29	Appointments of Junior Clerks (BPS-11) regular	11
30	Appointment of Assistant Cook (BPS-1) (Contract)	01
31	Appointment of Lab Attendant(BPS-1) (Contract)	01
32	Appointment of Lady Searcher (BPS-1) (Contract)	01
33	Appointment of Chowkidar (BPS-1) (Contract)	01
34	Appointment of Cleaner (BPS-1) (Contract)	01
35	Appointment of Chowkidar (BPS-1) (Contract)	01
36	Appointment of Lab Assistant (BPS-7) (Contract)	07
37	Appointment of Attendant (BPS-1) (Regular)	03
38	Appointment of Female Sweeper (BPS-1) (Contract)	01
39	Appointment of Naib Qasid (BPS-1) (Contract)	01
40	Promotion of Senior Clerk (BPS-14)	02
41	Upgradation of Telephone Operators BPS-7 to BPS-11	04
42	Upgradation of Protocol Driver BPS-11 to BPS-14	01
43	Upgradation of Protocol Driver BPS-08 to BPS-11	01
44	Upgradation of Lab Attendant BPS-3 to BPS-5	01
45	Upgradation of Lab Attendant BPS-3 to BPS-5	05
46	Upgradation of Lab Attendant BPS-11 to BPS-14	01
47	Upgradation of Lab Technologist BPS-12 to BPS-16	02
48	Appointment of Lab Technician (BPS-16) (Regular)	01
49	Appointment of Naib Qasid (PPS-2) (Temporary)	02
50	Appointment of Naib Qasid (BPS-1) Regular	02
51	Appointment of Library Attendant (BPS-1) Regular	01
52	Appointment of Malis (BPS-1) Regular	02
53	Appointment of Laboratory Attendant (BPS-1) Regular	02
54	Appointment of Chowkidar (BPS-1) (Regular)	01
55	Appointment of Sweeper (BPS-1) (Regular)	02
56	Appointment of Data Analyst(BPS-16) Regular	01

# Meetings of Authorities & Statutory Bodies

## CHAPTER 16

## SYNDICATE MEETINGS

118<sup>th</sup> meeting of the S ndicate held on 13-08-2020

119<sup>th</sup> meeting of the S ndicate held on 05-10-2020

120<sup>th</sup> meeting of the S ndicate held on 28-10-2020

121<sup>st</sup> meeting of the S ndicate held on 24-11-2020

122<sup>nd</sup> meeting of the S ndicate held on 13-03-2021

123<sup>rd</sup> meeting of the S ndicate held on 10-06-2021



## SENATE MEETINGS

8th meeting of the Senate held on 11-01-2021

9th meeting of the Senate held on 21-06-2021



## ACADEMIC COUNCIL MEETINGS

77th meeting of the Academic Council held on 14-09-2020

## FINANCE & PLANNING COMMITTEE MEETINGS

82nd meeting of F&PC held on 04-09-2020

83rd meeting of F&PC held on 10-06-2021



# Outreach Activities

## CHAPTER 17

## Commissioner, Afghan Refugees visits UET Peshawar

Prof. Dr. Qaisar Ali, met with the Commissioner, Afghan Refugees Federal Capital & AJK, Pakistan Mr. Abbas Khan on August 17, 2020. Both heads exchanged ideas of mutual interest and looked into the possibilities to sign a MoU in the near future for joint developmental projects. Prof. Dr. Qaisar Ali informed that UET Peshawar has been offering more than 100 reserved seats under the different programs to Afghan students at UET Peshawar. Mr. Abbas Khan paid tribute to the faculty of the Civil Engineering Department and the efforts of UET Peshawar for facilitating the Afghan students. He urged the need to start skill developmental courses for the Afghan students for their professional and personal development. He said, as a civil engineer and alumnus of UET Peshawar he would extend support to UET Peshawar in its development and growth. "I owe to my institution which helped me to achieve success in my career and it is about time to give back in the most



effective manner", he added. The meeting was attended by senior faculty members.

## Covid-19 Vaccination Drive

UET Peshawar in collaboration with Health Department Khyber Pakhtunkhwa arranged the Covid-19 vaccination drive on June 28, 2021 for the Employees and the Students. The Vice Chancellor Prof. Dr. Iftikhar Hussain has made all measures to expedite the process of vaccination on the guidelines of NOCS and HEC for prevention of Covid-19.

## Plantation Drive 2021

Prof. Dr. Iftikhar Hussain, Vice Chancellor inaugurated the spring tree plantation campaign 2021 by planting a tree in the University. The campaign was organized in by We Care Society in collaboration with IM Sciences Peshawar. Dr. Wasif Jamal, Head of We Care Society IM Sciences, Prof. Dr. Sehar Noor Senior Dean UET, Mr. Azeem Khan, Admin Officer, Mr. Shahid Zafar Private Secretary to Vice Chancellor and other staff also participated in the drive.

On the occasion, the Vice Chancellor said that world is facing issues like climate change which can be overcome with planting more trees. He urged the teachers, students and staff to plant as many trees as possible and participate in the Clean and Green Pakistan campaign launched by the government.



# Outreach Activities

## UET Media Outreach

The “UET Media” ensured a wide coverage of UET Peshawar’s official activities in print and electronic media. During the reporting period, around 68 events have been covered in print and electronic media, 109 various advertisements published in national dailies, organized 2 international/national conferences, have published 02 weekly feature in national dailies. Under outreach activities the Directorate participated in two education expos, published Undergraduate Prospectus, Postgraduates Prospectus (2020-21), Annual Report 2018-20, issue of Newsletter (Jan - Dec 2021) and UET Peshawar SDG’s Media Report 2018-20. The Directorate of Media & Publications planned and successfully executed social media campaign for Undergraduate and postgraduate admissions 2020-21. Executed the branding and marketing component of University under the Vice Chancellor’s Strategic Vision plan.

### Department of Civil Engineering

The students are facilitated for internship opportunities in the following departments.

S.No.	Name of Industry/Organization/Institute
1.	Communication and Works Department KPK
2.	Irrigation Department, KPK
3.	Peshawar Development authority
4.	SNGPL
5.	Pakistan Ordinance Factory
6.	OGDCL
7.	Public Health Engineering Department, KPK
8.	Local Govt. and Rural Development Department, KPK
9.	PKHA, CDA
10.	NESPAK, PDA
11.	NHA, PMD

### Department of Electrical Engineering, Bannu Campus

The following Outreach Activities/Liaison Activities were arranged by the department for students of Electrical Engineering, Bannu Campus.

S.No.	Activity	Date
1.	FYP Thesis Seminar	2 Nov 2020
2.	CDC for Students Guidance and Support	15 Nov 2020
3.	Career Counseling Seminar	2 December 2020
4.	Fully Funded Scholarships Webinar	25 December 2020
5.	Formal Writing Skills Seminar	5 January 2021
6.	Artificial Intelligence Applications Webinar	9 January 2021
7.	Applications, Letters and Resume Writing Seminar	2 September 2021
8.	Seven Emerging Technologies for Career Planning Webinar	14 September 2021
9.	Standard Development Goals Seminar	22 September 2021



UNIVERSITY OF  
ENGINEERING AND  
TECHNOLOGY, PESHAWAR

UET PESHAWAR



**SDGs MEDIA REPORT**

2018-20



### Gems & Jewelry Center of Excellence

- ▶ 57 Students have successfully completed the diploma of Gemology
- ▶ 19 students have successfully completed the diploma of Lapidary

# Litigation

## CHAPTER 19

## On-going and Decided Cases (Civil & Session Court) Peshawar

S.No.	TITLE OF CASE	STATUS
1	Engineer Aman Ullah v/s UET	Decided in favour of University
2	Qazi Raza-ur-Rehman v/s UET	Decided in favour of University
3	UET v/s Ameer Sardara/Faryal Azmat	Decided in favour of University
4	Imran Fazal v/s UET	Decided in favour of University
5	Dr. Nasir Ahmad v/s UET & others	Decided against the University
6	UET v/s Muhammad Tahir	On-going
7	UET v/s Muhammad Irfan	On-going
8	UET v/s Iftikhar Ahmed Khattak	On-going
9	UET v/s Samina Arif	On-going
10	UET v/s Munawar Khan	On-going
11	UET v/s Bilal Habib	On-going
12	UET v/s Ahmed Ali	On-going
13	UET v/s Malak Umer Sharif	On-going
14	UET v/s Mehmood Alam Khan	On-going
15	UET v/s Sikandar Khan	On-going
16	UET v/s Ihsan Ullah	On-going
17	UET v/s Waseem Ahmed	On-going
18	UET v/s Sheikh Imran	On-going
19	UET v/s Zia Ullah	On-going
20	UET v/s Jalal Ali	On-going
21	UET v/s Miss.Rabia Shahid	On-going
22	UET v/s Nadeem Khan	On-going
23	UET v/s Muzamal Arshad	On-going
24	UET v/s Imran Fazal	On-going
25	UET v/s Imran Ashraf	On-going
26	UET v/s Hamza Shakeel	On-going
27	UET v/s Awais Khawar	On-going
28	UET v/s Hasan Ali	On-going
29	UET v/s Essa Khan	On-going
30	UET v/s Shah Nasir	On-going
31	UET v/s Syed Raza Gillani	On-going
32	UET v/s Rizwan Habib	On-going
33	UET v/s Taimoor Gandapur	On-going
34	UET v/s Moeen-ud-din	On-going
35	UET v/s Shoaib Khan	On-going

S.No.	TITLE OF CASE	STATUS
36	UET v/s Naveed Aslam	On-going
37	UET v/s Dr. Imtiaz Ali Shah	On-going
38	UET v/s Muhammad Arshad	On-going
39	UET v/s Sohail Akber	On-going
40	UET v/s Engr.Sobia Iqbal	On-going
41	UET v/s Qazi Raza ur rehman	On-going
42	UET v/s M.Noman Kaka khel	On-going
43	UET v/s Engr.Talha Zahir	On-going
44	UET v/s Najaf Ali	On-going
45	UET v/s Qaiser Gul	On-going
46	UET v/s Mustafa Bari	On-going
47	UET v/s Muhammad Akbar	On-going
48	UET v/s Syed Kamran Ayub	On-going
49	UET v/s Saeed Ahmed	On-going
50	UET v/s Imran Ahmed	On-going
51	UET v/s Mustafa Kamal	On-going
52	Kamran Ayub v/s UET	On-going
53	UET v/s Fariduddin	On-going
54	UET v/s Faryal Azmat	On-going
55	UET v/s Engineer Aman Ullah	On-going
56	Imran Ashraf v/s UET	On-going
57	UET v/s Umar Imtiaz Gillani	On-going
58	UET v/s Bilal Ahmad	On-going
59	UET v/s Taimoor Usman	On-going
60	UET v/s Bilal Farooq	On-going
61	UET v/s Naveed Ahmad	On-going
62	UET v/s Owais Muhamudi	On-going
63	UET v/s Ikram Ullah	On-going
64	Farman Ali v/s UET	On-going
65	Rustam V/s UET	On-going
66	Abid Ali V/s UET	On-going
67	Essa Khan v/s UET	On-going
68	UET v/s Majid Ali	On-going
69	Irshad Ahmad & others v/s UET	On-going
70	UET v/s Waleed Shahjehan	On-going

## On-going and Decided Cases (High Court) Peshawar

S.No.	TITLE OF CASE	CASE NO	IN FAVOUR OF
1	UET v/s Naseer Ahmad	FAO No. 81-P/2018	Decided in favour of University
2	Dil Nawaz Khan System Administrator v/s Vice Chancellor	W.P. No. 1835/2018	Decided in favour of University
3	Dr. Nasim Ullah v/s UET	W.P. No. 4591-P/2019	Decided in favour of University
4	Sohrab Khan v/s UET	W.P. No. 6334-P/2019	Decided in favour of University
5	Mohsin Iqbal Qazi v/s UET	W.P. No. 2907-P/2020	Decided in favour of University
6	Muhammad Anab & other v/s UET	W.P. No. 1973-P/2020	Decided in favour of University
7	Siraj Ud Din v/s UET (Bannu)	W.P. No. 515-B/2020	Decided in favour of University
8	Alia Hakim v/s UET	W.P. No. 3021-P/2020	Decided in favour of University
9	Raza ullah v/s Vice Chancellor UET	W.P. No. 4812-P/2020	Decided in favour of University
10	Dr. Nisar Muhammad V/s UET	W.P. No. 4855-P/2020	Decided in favour of University
11	Muhammad Anwar Khan v/s UET	W.P. No. 5326-P/2020	Decided in favour of University
12	Khitab Gul Safi & Other v/s Vice Chancellor	W.P. No. 5180-P/2017	Decided in favour of University
13	Sheraz Khan v/s Registrar UET Peshawar	W.P. No. 3780-P/2018	Decided against the University
14	Dr. Farooq Ahamd v/s UET Peshawar	W.P. No. 3880/2018	Decided against the University
15	Ubaid Ullah v/s Vice Chancellor	COC. No. 505-P/2019	Decided against the University
16	Muhammad Ali v/s UET	COC. No. 404-P/2019	Decided against the University
17	Mian Gohar Ali Shah v/s Govt of KPK	W.P. No. 4748-P/2020	Decided against the University
18	Sida Hussain v/s Vice Chancellor UET	W.P. No. 580-P/2021	Decided against the University
19	PUTA v/s UET Peshawar	W.P. No.1518-P/2017	On-going
20	Sikandar Hayat v/s Vice Chancellor	W.P. No. 685-P/2018	On-going
21	M. Zubair and others v/s UET Peshawar	W.P. No. 3584/2018	On-going
22	Abdul Qayum v/s VC UET Peshawar (Bannu)	W.P. No. 332-B/2015	On-going
23	Asmat Ullah Marwat v/s UET Peshawar	W.P. No. 4913/2018	On-going
24	Ahmad Murad v/s UET Peshawar	W.P. No. 1163/2018	On-going
25	Sanam Rehman v/s UET	W.P. No. 948/2019	On-going
26	Dr. Owais Mehmoodi v/s UET Peshawar	W.P. No. 2418-P/2019	On-going
27	Muzaffar Abbas Shah v/s UET Peshawar (Abbottabad)	W.P. No. 327-A/2017	On-going
28	Amir Ullah Khan v/s UET Peshawar (Bannu)	W.P. No. 247-B/2019	On-going

# Litigation

29	Athar Hussain v/s UET	W.P. No. 4462-P/2019	On-going
30	Dr. Muhammad Mustafa Kamal v/s UET	W.P. No. 4312-P/2019	On-going
31	Sardar Ali & Others v/s UET	W.P. No. 4338-P/2019	On-going
32	Muhammad Shoaib v/s UET Peshawar	W.P. No. 4876-P/2019	On-going
33	Dr. Murtaz Ali v/s The Secretary HED and others	W.P. No. 3447-P/2019	On-going
34	Kiramat Ullah v/s V C UET & others	W.P. No. 5068-P/2019	On-going
35	Raham Sher & Other v/s UET	W.P. No. 5920-P/2019	On-going
36	UET v/s Samira Hayat	CR. 1164-P/2019	On-going
37	Shams Ul Khaliq v/s UET	W.P. No. 7481-P/2019	On-going
38	Gul Zaman & Other v/s UET & Others	W.P. No. 1559-P/2020	On-going
39	Engr. Nayyar Fazal v/s V C UET	W.P. No. 2112-P/2020	On-going
40	Muhammad Askar v/s V C & Others	W.P. No. 2534-P/2020	On-going
41	Mr. Maqbali Khan v/s UET	W.P. No. 2747-P/2020	On-going
42	Daim Khan v/s UET	W.P. No. 2814-P/2020	On-going
43	Zakir Ullah v/s UET	W.P. No. 2979-P/2020	On-going
44	Arif Waqas Ahmad v/s V C UET & others	W.P. No. 3688-P/2019	On-going
45	Bazmir Khan v/s University of Engineering	W.P. No. 4353-P/2020	On-going
46	Dr. Ikram ullah v/s Vice Chancellor UET	W.P. No. 144-P/2021	On-going
47	Muhammad Imran v/s UET	W.P. No. 550-P/2021	On-going
48	Muhammad Kazim Khan v/s UET	W.P. No. 769-P/2021	On-going
49	Saeed Ahmad v/s UET	W.P. No. 846-P/2021	On-going
50	Engr. Waqar Ahmad & Others v/s UET	W.P. No. 1560-P/2021	On-going
51	Sohail Ahmad v/s Pakistan Council	W.P. No. 2090-P/2021	On-going
52	Imran Khan v/s Vice Chancellor UET	W.P. No. 3559-P/2021	On-going
53	Muhammad Zohaib Khan v/s UET	COC. No. 74-B/2021	On-going
54	Lehaz Ullah Shah v/s UET	W.P. No. 4268-P/2021	On-going
55	Engr. Kamran Ahmad v/s VC UET	W.P. No. 4114-P/2021	On-going
56	Arif Ullah Azhar v/s Dr. Iftikhar Hussain	COC. No. 273/2021	On-going

### On-going and Decided Cases (Supreme Court of Pakistan)

S.No.	TITLE OF CASE	CASE NO.	STATUS
1	UET v/s Ubaid Ullah	CP No. 165/2021	Decided against the University
2	UET v/s Muhammad Ali	CP No. 164/2021	Decided against the University
3	UET Peshawar v/s Imtiaz Ahmad	CPLA No. 2501/2018	On-going
4	UET v/s Khuram Sultan	CP No. 1748/2019	On-going
5	UET v/s Arif Ullah Azhar	CP No. 51/2021	On-going
6	UET v/s Gohar Aziz & Others	CP No. 1378/2020	On-going
7	UET v/s Adnan Nawaz & Others	CP No. 1379/2020	On-going
8	UET v/s Haseen Ullah Jan	CP No. 1515/2020	On-going
9	UET v/s Jamal Nasir	CP No. 1519/2020	On-going
10	UET v/s Wajid Ali & Others	CP No. 1383/2020	On-going
11	UET v/s Seemab Gul & Others	CP No. 1384/2020	On-going
12	UET v/s Ihsan Ullah & Others	CP No. 1380/2020	On-going
13	UET v/s Sajid Khaleeq	CP No. 1382/2020	On-going
14	UET v/s Syed Babar Abbas & Others	CP No. 1516/2020	On-going
15	UET v/s Gulandam Farhat	CP No. 1518/2020	On-going
16	UET v/s Mukhtair Ayaz & Others	CP No. 1517/2020	On-going
17	UET v/s Iqbal Ud Din	CP No. 1381/2020	On-going
18	UET v/s Sara Islam	CP No. 1385/2020	On-going
19	UET v/s Dr. Noor Muhammad	CPLA No. 185-P/2020	On-going
20	Engr. Saima Hussan v/s UET	CPLA No. 2812/2019	On-going
21	UET v/s Engr. Dr. Khizar Azam	CPLA No. 74/2021	On-going
22	UET v/s Mian Gohar Ali Shah	Fresh Case	On-going
23	UET v/s Sheraz Khan	Fresh Case	On-going

### Recovery from Absconded Scholars

UET Peshawar is cognizant of the fact that scholars who are sent abroad to pursue Ph.D in their relevant fields return on time and serve the institution. However, in case of absconded scholars, UET Peshawar takes legal action to recover money that is spent on their education. During the reporting period the University recovered **Rs. 113 million** from the absconded scholars.

## 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.

### **Patron**

Prof. Dr. Iftikhar Hussain  
Vice Chancellor

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