



**NWFP UNIVERSITY OF ENGINEERING
& TECHNOLOGY, PESHAWAR**

Annual Report 2006-07



OUR VISION

Striving for the Highest Level of
Engineering Excellence

Editor's Note

Dear Readers

The NWFP UET Annual Report outlines our activities during the year 2006. In keeping with our previous format, we present highlights of academic and research activities, as well as progress of developmental projects.

Year 2006 was a challenging year for UET. During the year the University vigorously pursued its long-term objective to strengthen the teaching faculty and build academic and business linkages.

I hope the Report is both informative and pleasing for all our readers. Your opinions and suggestions are welcome, to ensure that the next issue is better than this one.

Finally, I am grateful for the tremendous support provided by the administration and teaching faculty in putting this report together.

Shamaila Farooq
Director Media

Annual Report

06-07

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Contents

| | |
|----------------------|----|
| Foreword | 1 |
| Campuses | 3 |
| Development Projects | 5 |
| Academics | 10 |
| Research Activities | 17 |
| Financial Statements | 25 |
| Facts & Figures | 26 |

Mission Statement

To impart state-of-the-art engineering education, through training and research, and produce highly qualified, well-rounded professional engineers who play a leading role in the socio-economic transformation by powering, and driving, a knowledge-based economy for national development.

Annual Report

06-07

OUR VISION

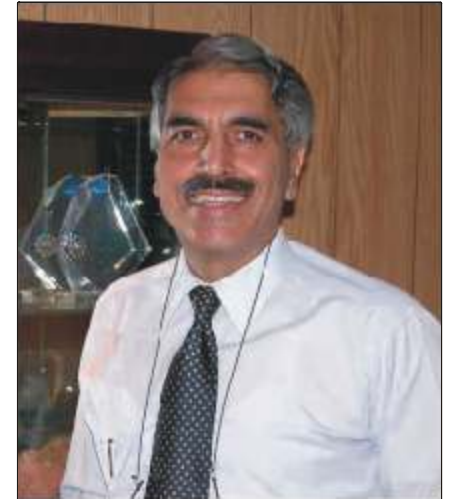
Striving for the Highest Level of
Engineering Excellence

Foreword

Annual Report

06-07

Another very satisfying year has come to a close. In all areas of our activities, there was encouraging advancement and visible improvement. Our development-projects portfolio crossed the two billion-rupee mark, and most projects were on track, following the proposed time-lines. Our Earthquake Engineering Center is being upgraded, and has taken a central position in earthquake technology in the country. We worked with the GoNWFP, the Ministry of Housing, GoP, and Pakistan Engineering Council (PEC) in all facets, including relief efforts, modular design of buildings, materials selection, retrofitting guidelines and development of an earthquake code for Pakistan.



We have started a new Department of Industrial Engineering, which will bridge the gap between what we are producing and what the industry needs for maximum efficiency. The semester systems introduced two years ago is now fully established. Students are engaged more rigorously in their academic programs, and have no time for the negative political activities they sometimes engaged in. We have started new courses in "communications skills", "professional ethics" and "entrepreneurship". We are now making a subtle shift of strengthening the 'softer' side of education. We are cognizant that along with IQ, it is essential to have a strong EQ (emotional quotient) for success. Our graduates must be well rounded!

In our Mining Engineering Department, we are establishing a Gemstone Development Center that will train technicians in gemstone technology, and create a clearing-house where the natural treasure endowed to NWFP can be credibly evaluated. We are forging wider and deeper linkages with industry and other academic institutions, to make our curriculum more relevant and practical. Our students are now evaluating teachers through a student-developed software with total confidentiality. We have a video-conferencing center, that has added another dimension to the way education and knowledge is disseminated. We have established a Quality Assurance Cell, to monitor all activities. More than fifty faculty members have gone overseas in the last three years for their PhD's, thirty-eight in last year alone. We are excited when this human-resource returns, our university will be a changed place. We have improved the quality of our MS and PhD programs, making research-paper publication an integral part for all candidates.

We have registered NWFP UET as a consulting engineer with the PEC. With the tremendous expertise residing in our qualified faculty, supported by resource-rich laboratories and an excellent student body, we offer top value-for-money to our clients. More importantly, our faculty and students get trained on real-life projects. Project exhibitions and open houses have created opportunities for students to be hired on-campus by employers. To the top students, we offer competitive starting salaries so that the best are retained to teach in their alma mater.

Engineering continues to be central to the development strategy for the country. The University of Engineering, Science and Technology, Pakistan, Project (UESTP) has now expanded to establishment of nine world-class engineering universities. For the UESTP, Peshawar, we are using our humble efforts to bring this to fruition. Land has already been mutated by the GoNWFP in HEC's name.

OUR VISION

Striving for the Highest Level of
Engineering Excellence



Foreword

We are submitting a PC-I to develop a campus on the 405-acre land we have in Jallozai, near Peshawar. This will be a great milestone, and allow us expansion that is impossible in our current, tightly packed campus carved out of Peshawar University. We are also planning a campus in Bajaur Agency in FATA. While this poses a huge challenge, it is exciting because an institution of higher learning in engineering sciences will go a long way in quelling the surging unrest in the restive tribal areas.

The credit for all these humble achievements goes squarely to the excellent student body, the dedicated faculty and hard working administrative machinery. It is easy to achieve goals with such a potent team, working like a cohesive and well-oiled engine. But none of this would be possible without the generous support from the Planning Commission of Pakistan, the Higher Education Commission and the Pakistan Engineering Council. My heartfelt gratitude to Dr. Akram Sheikh, Dr. Atta ur Rehman and Dr. Sohail Naqvi.

Closer to home, we are most fortunate to have unconditional support from the NWFP Government. The Chief Minister, the Chief Secretary, the Additional Chief Secretary and Secretary Higher Education have been exceptionally forthright in their help. Finally, all this would be impossible without the guidance and total support of the Chancellor and Governor, Lieutenant General Ali Mohammad Jan Aurakzai, who always stood behind us like a solid rock.

Thank you, and God bless you all!



Engr. Syed Imtiaz Hussain Gilani
Vice Chancellor

Annual Report

06-07



OUR VISION

Striving for the highest Level of
Engineering Excellence

Campuses

Annual Report
06-07

The University

NWFP University of Engineering and Technology (NWFP UET) 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 sixteen departments, covering an entire spectrum of engineering disciplines, from the traditional, such as electrical and mechanical, to the cutting-edge, such as electronics, computer sciences, mechatronics, and industrial engineering.



There is a robust post-graduate program, where scholars are engaged in rigorous training and research towards the attainment of Masters and Ph.D degrees. We have started an ambitious program of linkages with industry, other government and non-government agencies and universities. Such interaction affords invaluable training to our faculty and students, through split programmes, joint research and faculty exchanges.

Extra-curricular and co-curricular activities are an integral part of student learning. Sports, cultural activities, debating, drama and social activities not only gives our students a break from routine academic programs, but also help hone their skills in becoming well-integrated individuals in society. To-date, more than eight thousand of our well-rounded graduates are serving the needs of Pakistan. Many have rightfully achieved high positions of responsibility and excellence in their chosen fields, and done us all proud.

North West Frontier Province is steeped in history and true folklore of hospitality, valour and romance. Peshawar valley has been the gateway to civilizations for thousands of years, making Peshawar city a cradle of knowledge, trade and industry. NWFP UET is a microcosm of this rich and varied cultural diversity.

At NWFP UET we, in our humble capacity, are proud to be part of the continuing tradition of making our people, and this region, an integral part

of a continuing saga where, amidst the rough and tumble of this global "hotspot", there also are shining examples of institutions engaged in the high-end of engineering education.

Peshawar Campus

With a modest beginning in 1952 as a "constituent" college of Peshawar University, the NWFP UET was established in 1980. Since then, three satellite campuses in Abbottabad, Bannu and Mardan have been established. Recently we have expanded to Hayatabad also. However, Peshawar Campus remains the central nucleus of the University, keeping everything moving along the correct path.

Located in the historic city of Peshawar, NWFP 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. New projects are in the pipeline that includes starting new technologies, national level centers for research, ambitious programs to expand built-up area, strengthening of departments, particularly laboratories, and a major face-lift and improvement of the existing infrastructure.

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Mardan Campus



As a result of our growth in the last few years, students were offered an option to get admission in other regions of NWFP. Mardan Campus was inaugurated in 2002 with a spirit to bring engineering education to people at their door steps. The campus is spread over an area of more than 22 acres, including a covered area of 190,000 sq.ft., consisting of an administration block, academic blocks, recreation centre, students and faculty housing. At Mardan we offer two engineering undergraduate programmes that include Telecommunication Engineering and Computer Software Engineering. All the laboratories have recently been strengthened with the latest cutting-edge equipment. The ever increasing applications demonstrate that student find programmes offered credible and useful.

Abbottabad Campus



The Chancellor, NWFP UET 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 NWFP UET 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.

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 programs. Large investment in strengthening laboratories, and upgrading infrastructure are being done to quickly bring this campus at par with others.

Campuses

Annual Report

06-07

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Development Projects

Annual Report
06-07

Institute of Mechatronics Engineering

Project Director: Prof. Dr. Irfan Ullah
Funding Agency: Higher Education Commission (HEC)

Introduction:

Mechatronics is defined as “the synergetic combination of precision mechanical engineering, electronics control and systems thinking in the design of products and processes”. It is an emerging multi-disciplinary field of engineering, combining parts of mechanical engineering, electronics, and computer engineering. The Japanese were the first to introduce a branch of engineering that contained relevant portions of Mechanical engineering as well as electronics; they called it Mechatronics.

NWFP UET is setting up an Institute of Mechatronics Engineering with an aim to produce about thirty graduates engineers in the field of Mechatronics engineering every year. The Institute is one of its kind in this field in NWFP. Postgraduate degrees are also planned to be offered at a later stage. The Institute will also carry out research in this field, and disseminate the results among the industry, and other stakeholders. The salient features are:

Approved Date: 21-08-2004 Total Cost: Rs. 147.60 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|-------------------------------|-----------------------|-------------|
| Equipment | 32.285 | 15.288 |
| Multimedia Center | 04.040 | - |
| Building | 42.582 | 20.360 |
| Foreign Training | 33.059 | 10.765 |
| Transport | 4.600 | 1.900 |
| Furniture | 1.964 | - |
| Salaries | 3.259 | 1.314 |
| Telephone Exchange | 2.00 | - |
| Land | 19.60 | 20.00 |
| Bank, L.C., Insurance Charges | 0.969 | 0.618 |
| Misc. Charges | 3.242 | 0.353 |

Completion Date: 20-08-2007

Strengthening of Existing Earthquake Engineering Center

Project Director: Prof. Dr. Qaisar Ali
Funding Agency: Higher Education Commission (HEC)

Introduction:

This project aims to strengthening of existing Earthquake Engineering Center at NWFP UET. This includes procurement of equipment, Human Resource Development, besides civil works and other components of the project. Major equipment includes a two degree of freedom, 6m x 6m high performance seismic simulator, pseudo dynamic testing facility; base isolation testing equipment and strong motion instrumentation. This will make the Center the biggest in the South Asia.

Under Human Resource Development 10 Ph.D students will be sent to world class earthquake engineering institutions for Ph.D in earthquake engineering and engineering seismology. The Center initially established in year 2003 with a modest funding by HEC has been making significant contribution in the reconstruction of the earthquake affected areas. The salient features are:



Approved Date: 29-12-2006 Total Cost: Rs. 487.219 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|-----------------------------|-----------------------|-------------|
| Civil Works | 32.382 | - |
| Equipment | 356.977 | - |
| Books/Journals | 0.500 | - |
| Furniture & Fixtures | 2.185 | - |
| Transport | 2.200 | - |
| Human Resource Development | 85.00 | - |
| Researcher Hostel | 0.675 | - |
| Miscellaneous | 3.640 | 0.051 |
| Salaries of Execution Staff | 3.660 | 0.080 |

Completion Date: 28-12-2011

OUR VISION

Striving for the Highest Level of
Engineering Excellence

National Institute of Urban Infrastructure Planning

Project Director: Prof. Amjad Ali
Funding Agency: Higher Education Commission (HEC)

Introduction:

National Institute of Urban Planning, aims to address the increasing problems of infrastructures, and environmental degradation in urban centers of Pakistan. The project will mainly focus on solid waste management, water and sanitation, urban land usage, transport planning, and Geographic Information Systems (GIS). The salient features are:

Approved Date: 31-12-2004 Total Cost: Rs. 174.146 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|----------------------------------|-----------------------|-------------|
| Civil Work | 61.955 | 11.828 |
| Land | 20.00 | 17.400 |
| Equipment | 15.00 | - |
| Books/Journals | 12.00 | - |
| Transport | 3.100 | 1.197 |
| Furniture | 2.500 | - |
| Networking | 3.200 | - |
| Misc. Charges | 0.425 | 0.387 |
| Salaries of execution staff | 3.660 | 1.239 |
| Training | 28.600 | 6.610 |
| Salaries of implementation staff | 7.188 | - |
| Utilities & POL | 9.700 | - |
| Research | 5.250 | - |
| Travel and Researcher hosting | 1.568 | 1.167 |

Completion Date: 30-11-2007

Provision of Academic/Research Facilities For Gemstones

Project Director: Prof. Khan Gul Jadoon
Funding Agency: Higher Education Commission (HEC)

Approved Date 24-08-2006 Total Cost Rs. 32.929 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|-----------------------------|-----------------------|-------------|
| Civil Work | 3.00 | - |
| Equipments | 12.234 | - |
| Books/Journals | 0.640 | - |
| Furniture & Fixtures | 0.940 | - |
| Transport | 2.100 | - |
| Training | 12.003 | 1.991 |
| Misc. Charges | 0.500 | - |
| Salaries of Execution Staff | 1.512 | - |

Completion Date 23-08-2008

Continuing Engineering Education Center

Project Director: Dr. M. Mansoor Khan
Funding Agency: Higher Education Commission (HEC)

Introduction:

Continuing Engineering Education Center will offer continuing engineering education via engineering courses, in-house training and seminars for professional development to the faculty. These initiatives will provide an opportunity to engineers to brainstorm latest practical ideas to resolve real-life engineering issues. The salient features are:

Approved Date: 17-09-2005 Total Cost: Rs. 25.024 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|------------------|-----------------------|-------------|
| Civil Work | 12.970 | 0.461 |
| Air conditioning | 0.900 | - |
| Networking | 1.284 | - |
| Equipment | 4.545 | 0.116 |
| Books & Journals | 1.500 | - |
| Furniture | 1.225 | - |
| Power Protection | 1.000 | - |
| Vehicle | 0.600 | 0.595 |
| Contingencies | 1.000 | 0.180 |

Completion Date 16-09-2007

Development Projects

Annual Report

06-07



OUR VISION

Striving for the Highest Level of
Engineering Excellence

Development Projects

Annual Report
06-07

Strengthening, Updating of Peshawar Campus

Project Director: Prof. Abdul Jabbar
Funding Agency: Higher Education Commission (HEC)

Introduction:

The project focuses on capacity building and imparting education and training at undergraduate and postgraduate levels through quality Ph.D faculty, coupled with state-of-the-art laboratories. The project includes Human Resource Development, under which 25 faculty members have been sent abroad for pursuing Ph.D in different engineering disciplines. It also includes establishing of Industrial Engineering Department, which is becoming increasingly important in the highly technological world of the future, and to provide a forum for entrepreneurs and academia. Infrastructure development is another component of the project, that includes construction of an Academic Block, and construction of hostels for two hundred students. The salient features are:



Academic Block

Approved Date 20-05-2005 Total Cost Rs. 479 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|--------------------------------------|-----------------------|-------------|
| 1. Academic Block Civil Works | 94.958 | 0.849 |
| 2. Boys Hostel | 39.550 | 3.643 |
| Industrial Engineering Department | 186.120 | 42.486 |
| Human Resource Development | 152.50 | 86.894 |
| Salaries | 1.872 | 0.591 |
| Contingency | 4.000 | 0.711 |

Completion Date 19-05-2008

Construction of Hostel of 100 Girls Students (one each in Peshawar and Abbottabad Campuses)

Project Director: Prof. Fazal Khaliq
Funding Agency: Higher Education Commission (HEC)

Introduction:

Construction of hostels for 100 girls students, one each in the Peshawar and Abbottabad campuses, will enhance the existing facilities in various fields of engineering, as envisaged in the Education Policy 1997-2010. Both in Peshawar and Abbottabad the intake of female students is very high, and in Abbottabad it is the highest as compared to other campuses. Keeping in view the increased number of female students and their demand for accommodation, these hostels will cater for this. The salient features are:

Approved Date: 01-12-2004

Total Cost: Rs. 36.584 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|--------------------|-----------------------|-------------|
| Building | 33.618 | 10.845 |
| Furniture/Fixtures | 2.366 | - |
| Misc. Charges | 0.600 | 0.295 |
| Salary of Staff | 0.300 | 0.208 |

Completion Date: 07-05-2008



Girls Hostel

OUR VISION

Striving for the Highest Level of
Engineering Excellence



Establishment of New Campuses at Mardan, Bannu & Abbottabad

Project Director: Muhammad Sarwar Khan
Funding Agency: Higher Education Commission (HEC)

Introduction:

NWFP UET established its satellite campuses in other regions of NWFP in order to provide engineering education to the people at their door steps. In this regard, Mardan Campus was inaugurated in 2002. Similarly, Bannu Campus became operational in 2002 and in October 2002, the University inaugurated its campus in Abbottabad by offering a combination of engineering and non engineering undergraduate programs in Electronics Engineering and Architecture, City & Regional Planning. The salient features are:

Approved Date: 08-10-2003

Total Cost: Rs. 154.634 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|--|-----------------------|-------------|
| Laboratory Equipment | 90.373 | 94.9.6 |
| Rehabilitation of Mardan and Bannu Campuses | 17.355 | 11.472 |
| Books and Journals | 04.371 | 4.392 |
| Furniture | 03.134 | 3.142 |
| Transport Facilities for Students | 8.860 | 9.750 |
| Bank Charges, LC Charges, Loading Unloading, Insurance & Clearance Charges | 02.348 | 3.223 |
| Salaries of Faculty Execution Staff | 2.386 | 2.240 |
| Contingency | 7.363 | 1.334 |
| Human Resource Development | 18.444 | - |

Completion Date: 31-12-2008

Wide Spread Internet Setup

Project Director: Dr. Inayat Ullah Khan Babar
Funding Agency: Higher Education Commission (HEC)

Introduction:

The aim of this project was to build an infrastructure for the automation of this University in the shape of an Internet that can enjoy the benefits of information technology in terms of fast, efficient and paperless working of international standards.

Information Services Center (ISC) successfully completed this project, meeting the deadline of two years given by HEC. The project was declared as the best among the on going projects of UET by HEC monitoring team. The salient features are:

Approved Date: 19-10-2004

Total Cost: Rs. 35.359 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|----------------------------|-----------------------|-------------|
| Equipment | 25.092 | 25.553 |
| Staff Salaries | 1.800 | 1.839 |
| Consultancy | 1.004 | 0.527 |
| Bandwidth charges | 5.893 | 5.893 |
| Contingency | 1.004 | 1.013 |
| Furniture/Fixture | 0.383 | 0.375 |
| Bank, L.C., Insurance etc. | 0.183 | 0.159 |

Completion Date: 18-10-2006



Development Projects

Annual Report

06-07



OUR VISION

Striving for the Highest Level of
Engineering Excellence

Development Projects

Annual Report
06-07

Construction of Hostel For Foreign Visiting Faculty

Project Director: Lt. Col. (Retd) Imtiaz Ahmad Khan
Funding Agency: Higher Education Commission (HEC)

Introduction:

The University is building a new hostel for visiting foreign faculty. The hostel will provide accommodation and allied facilities to visiting faculty. The salient features are:

Approved Date: 04-04-2005 Total Cost: Rs. 17.339 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|---|-----------------------|-------------|
| Civil Works | 12.783 | 5.806 |
| Furniture & Furnishing | 2.223 | - |
| Networking and Office Facilities | 1.132 | - |
| Stand by Generator (40KVA) Power Protection | 0.800 | - |
| Contingency @ 3% on the total cost | 0.440 | 0.087 |

Completion Date: 31-12-2007



Hostel for foreign visiting faculty

Endowment Fund project

Project Director: Dr. Azzam-ul-Asar
Funding Agency: Provincial government (HEC)

Introduction:

Endowment Fund project was awarded to UET Peshawar for financing Ph.D. and M.S. programs in the University. The scope of the project is to provide training and research skills in the field of Telecom Engineering and Artificial Intelligence. The salient features are:

Approved Date: 04-04-2005 Total Cost: Rs. 15.187 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|--------------------------|-----------------------|-------------|
| Equipment | 2.657.408 | 73.330 |
| Scholarship | 6.165.684 | 1,291.000 |
| Tuition Fee/Registration | 2.648.039 | 299.000 |
| Remuneration | 1.627.191 | 349.955 |
| Salaries | 38.967 | 69.634 |
| Training | 64.250 | 546.000 |
| Printing | 1.850 | 1.850 |
| Course Fee | 30.500 | 30.500 |
| Books | - | 5.060 |
| Seminar | - | 28.045 |
| Miscellaneous | 1124400 | |

Strengthening of Satellite Campuses

Project Director: Muhammad Sarwar Khan
Funding Agency: Higher Education Commission (HEC)

Approved Date: 24-10-2005 Total Cost: Rs. 449.00 (M)

| Description | Cost (Rs. In Million) | Expenditure |
|---------------------------------------|-----------------------|-------------|
| Civil Work | 194.546 | 5.011 |
| Strengthening of existing departments | 95.463 | 66.271 |
| Human Resource Development | 142.20 | 0.761 |
| Furniture/Fixture | 10.471 | - |
| Salaries | 4.320 | 0.370 |
| Contingency | 2.000 | 0.894 |

Completion Date: 23-10-2010

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Convocation 2006

NWFP UET held the 10th Convocation on November 22nd 2006. NWFP Governor, Lt. Gen. Ali Muhammad Jan Aurakzai, the Chancellor of the University, said the federal government has been laying emphasis on higher

pace with the rapidly advancing world and keep our knowledge up-to-date. Having received degrees, the Governor said, is not the end of the learning process and from here onward, they have to embark upon a new journey in



education, and it has made a phenomenal increase in funds for public sector universities, from Rs. 600 million to Rs. 22 billion per annum, over the past few years.

The Governor said engineers are considered builders of nations, and their prime responsibility is to measure-up the growing technological demands of society, and to improve the quality of life particularly for those living in rural areas, by optimum application of their knowledge and skills.

Highlighting the importance of higher education he said... "although we have done reasonably well during the recent past, we are still far away from the developed world in the field of engineering, and therefore, have to do a lot in this respect". He appreciated the University for its commendable performance and said, besides bringing improvements in under-graduate programmes of studies, it has also made remarkable progress in postgraduate education.

Addressing the graduating engineers, the Governor said that the world is changing at a fast pace and technology is making rapid strides. If Pakistan is to survive as an honorable member in the comity of nations, we have to keep

their practical lives.

The Vice Chancellor, Engr. Syed Imtiaz Hussain Gilani welcomed the guests and said a paradigm shift has been made from conventional education to a practical one. New courses, such as "professional ethics," "entrepreneurship" and "communication skills" have also been incorporated in the curriculum, for personality development of students on constructive lines, and to ensure their character building.



The Governor gave away degrees and awards to the graduates, including, Suleman Khan (Agricultural Engineering), Muhammad Umair Zaman (Civil Engineering), Muhammad Munib Anwar (Chemical Engineering), Muhammad Sadiq (Mechanical Engineering), Jehangir Khan (Mining Engineering), Syed Asghar Ghani (BS Computer Science), Iftikhar Ahmad (BS Information Technology) and Saad Mubeen (Electrical Engineering) while Shoab Azmat (Computer System Engineering) and Shafi Ullah Khan, bagged both the gold medals, as well as, Presidential cash awards. Khalid Khan Afridi and Farman Abdul Ghafoor received presidential cash awards for their outstanding academic performance.



Academics

Annual Report

06-07

OUR VISION

Striving for the highest Level of
Engineering Excellence

Academic Linkages

MoU with MCEER, USA

An MoU in research collaboration in earthquake engineering between UET Earthquake Engineering Center (EEC) and Multi disciplinary Center for Earthquake Engineering Research (MCEER), USA, was signed to promote and enhance the linkages between these organizations, with an ultimate aim to reduce future losses of life and property damage from earthquakes.

MoU with METU, Turkey

UET and Middle East Technical University (METU), Turkey, entered into a mutual cooperation in the areas of faculty development, post doctoral programs, setting up of “smart-class” interactive learning centers, technoparks, and technical assistance in technology transfer. The Vice Chancellor and METU Rector, Prof. Dr. Ural Akbulut, signed MoU on 13th September 2006.

MoU with SHA

UET signed a MoU with the Swiss Humanitarian Aid (SHA) for improved infrastructure development in earthquake-hit areas. The MoU was signed between the Vice Chancellor and Thomas Fislser, Head of the Reconstruction Team, SHA, following by a press briefing at the Main Campus.



MoU with Loughborough, UK

The University signed a five-year MoU with Loughborough University UK. This MoU is mainly aimed to engage in academic cooperation in areas of research and degree programmes.



Seminars & Conferences

International Conference on Higher Education for Development

In collaboration with HEC, and Campus Consultancy Services (CCS), UET held an international conference on “Higher Education for Development” on 8 and 9 May, 2006 at HEC Headquarters, Islamabad.

The Conference aimed to create a forum for exchange of ideas between university leadership in Pakistan and UK, development partners and other stakeholders. Prof. Dr. Atta-ur-Rehman Chairman (HEC) was the chief guest on the occasion.

The conference had four themes:

- Management of Higher Education-Sharing of Best Practices
- Industry and Higher Education Interaction
- Curriculum Development for the 21st Century-Learning and Research
- Internationalization of Higher Education

Experts spoke in detail on these themes.



Seminars & Conferences

Second IEEE International Conference on Emerging Technologies (ICET 2006)

The Second International Conference on "Emerging Technologies" was held on 13 and 14 November, 2006 in Peshawar. Guests from within the country and abroad, including USA, UK, Canada, Germany, China, Korea, Malaysia, Iran, India and Bangladesh participated in the Conference. A total of 127 technical papers out of 400 were selected.



Twelve technical sessions were held in which seventy two technical papers were presented. The rest of the papers were included in "Poster Session". Two tutorials were held, one on "WIMAX", conducted by Dr. Raziq Yaqub from Toshiba, USA, and the other on "Hybrid Vehicles", conducted by Dr. Iftikhar Ahmad Khan, from General Motors, USA. The keynote speech was delivered by Prof. Dr. Shakeel Akhter from UAE on "Wearable Computers" in the Inaugural Session.

The Conference was inaugurated by the Governor, NWFP, Lt. Gen. Ali Muhammad Jan Aurakzai. The Governor said the field of engineering was "key" to developing advance technologies for the global

economy, and this moot was especially significant, because it brought together world renowned and emerging experts to discuss phenomenal advances in the field of engineering, particularly information technology. The closing ceremony was held on November 14, 2006. Dr. Sibghat Ullah from Microsoft, Karachi delivered the inaugural speech on "Academic Alliance", followed by a panel discussion comprising of top experts in the field of electrical engineering including fiber optics, wireless communication, and cellular technology and computer networks. The Conference was concluded by the Vice Chancellor Engr. Syed Imtiaz Hussain Gilani, and was formally closed by the IEEE Peshawar Subsection Chair, Dr. Azzam-ul-Asar. The Vice Chancellor particularly appreciated the efforts of Prof. Dr. Azzam-ul-Asar and IEEE student team for successful management and smooth running of the conference. Certificates and souvenirs were distributed among the participants and organizers at the concluding session. A cultural show with a formal banquet was arranged. The wife of Governor, NWFP, was the chief guest on the occasion.



Academics

Annual Report

06-07

OUR VISION

Striving for the highest Level of
Engineering Excellence

Seminars & Conferences

Seismic Hazard Analysis

A lecture on "Seismic Hazard Analysis" was organized by Dr. Qaiser Ali, Associate Prof. Department of Civil Engineering for postgraduate students on "Engineering Seismology".

Dr. Mona Lisa, Assistant Professor, Department of Earth Sciences, Quaid-e-Azam University, Islamabad, was the resource person for this lecture. She discussed the basics of engineering seismology and covered topic such as "structure of planet earth", "folds and faults, earthquakes and their types", "foreshocks and aftershocks", "tectonic theory", "elastic rebound theory", "seismology and tectonic settings of Pakistan".

Dr. Mona also focused on Seismic Hazard Analysis of Northern Pakistan and explained in detail the steps followed for the assessment of seismic hazard on deterministic and probabilistic basis. She informed the participants that seismic hazard must be accurately and rationally assessed and incorporated into the building code so that losses due to future earthquakes could be reduced.

Information and Communication Technologies

The Department of Electrical Engineering, in collaboration with the HTSPE, a leading international consultancy company, working in different areas of capacity and community development in Pakistan, conducted a one-week training course on "Information and Communication Technologies" for the employees of FATA. The objective of this training course was to provide FATA employees the latest knowledge and trends in the field of information and communication technologies which comes under HTSPE's Education, Employment and Social Development project. Dr. M. Yahya, Professor, Department of Electrical Engineering, was the lead trainer of the course. The training was conducted in two phases and thirty six employees were trained in the program.

Enhancing Quality, Productivity through Kaizen Management

A one-day seminar on "Enhancing Quality, Productivity through Kaizen Management" was held in collaboration with National Productivity Organization (NPO), Ministry of Industrial, Production & Special Initiatives, Islamabad. Mr. Hassan Haider, Head Training Group, NPO briefed the participants on quality management tools and urged to train graduates with latest management trends.

One day Symposium on Nanotechnology

A one-day Symposium on "Nanotechnology", jointly sponsored by HEC and UET, was held at UET Peshawar. Different universities and institutions participated. The symposium was aimed at providing a common platform for

enhanced interaction between university and industrial sector so that researchers, industrialists and academia could look into the application and scope of this emerging technology in Pakistan. The Vice Chancellor presided over the seminar.



Seminar on Automotive Electrical Systems

Department of Electrical Engineering and BOASAR conducted a seminar on "Automotive Electrical Systems: From Conventional to Hybrid Vehicles and Beyond" on March 22, 2006. The objective was to introduce latest developments in the automotive industry that make the vehicles significantly more efficient and environment-friendly. These vehicles consume less fuel and produce lower tailpipe emissions. The speaker was Dr. Iftikhar Ahmad Khan who has joined UET as a "foreign faculty".



Honours & Awards



UET Lecturer Honoured with Presidential Award

Engr. Sadeeq Jan, Lecturer, Department of Computer Systems Engineering, was honoured by Mr. Javed Ashraf Qazi, Federal Minister for Education, with the Presidential Award "Azaz-e-Sabqat, 2005", for academic distinction in professional education in NWFP.

The presentation was made at the Ministry of Education, Islamabad, which administers the awards on behalf of President of Pakistan. Engr. Sadeeq was nominated by the provincial government after competition held amongst all professional institutions of NWFP. Currently he is doing his MS in Sweden in computer systems engineering, under an HEC scholarship. He has always remained an outstanding student.

Siemens Gold Medal Award

Mr. Saad Mubeen got SIEMENS Gold Medal for achieving highest number of marks in the discipline of Electrical Engineering among the leading engineering universities of the country. He was awarded the Gold Medal on the recommendation of NWFP, UET Peshawar certifying his standing as the



top student in the year 2006 in the faculty of Electrical Engineering.

The medal was presented at an awards ceremony in Karachi, organized by M/S SIEMENS Pakistan Ltd. and presided upon by Mr. Shamsh Kassim-Lakha, founder president Aga Khan University and member committee for government reforms.

NWFP UET registered as IEEE Peshawar Subsection

NWFP UET Peshawar was registered with the IEEE as its Peshawar Subsection in 2005. The Subsection, since its inception has organized a number of activities including seminars, meetings and conferences. However the biggest event organized by IEEE Peshawar Subsection was an International Conference on Emerging Technologies on November 13-14, 2006 held at Peshawar, jointly organized by UET Peshawar, HEC, Pakistan Science Foundation (PSF), universities and institutions.

CREATE-IEEE Student Branch

The IEEE's first-ever student branch of the province was registered by the students of NWFP UET Peshawar by the name of IEEE CREATE (Center for Research in Engineering and Advancement of Technology). Ever since its creation, CREATE is actively engaged in events for sharing knowledge and promoting IEEE activities.

So far, CREATE has successfully organized numerous one-day lectures on topics ranging from WiMax to advancement in RADAR technology, and final-year project selection. It demonstrated excellent leadership and organizational skills during the first-ever IEEE International Conference on Emerging Technology (ICET 2006).



Academics

Annual Report

06-07

OUR VISION

Striving for the highest Level of
Engineering Excellence

Ph.D/M.Sc Scholars

| Name | Department | Country |
|------------------------|-------------------------------|---------|
| Nasruminallah | Telecommunication Engineering | UK |
| Akhtar Hussain Khalil | Telecommunication Engineering | UK |
| Muhammad Amir | Telecommunication Engineering | UK |
| Sadiquallah | Telecommunication Engineering | UK |
| Naveed Mufti | Telecommunication Engineering | UK |
| Muhammad Shafi | Computer Software Engineering | UK |
| Sadaqat Jan | Computer Software Engineering | UK |
| Muhammad Irfan Khattak | Electrical Engineering | UK |
| Waseem Ahmad | Electrical Engineering | UK |
| Naveed UI Haq | Electrical Engineering | USA |
| Naeem Khan | Electrical Engineering | UK |
| Fayaz Ahmad Khan | Civil Engineering | UK |
| Kamran Ghani | Computer Software Engineering | UK |

| Name | Department | Country |
|--------------------------------|-------------------------------------|---------|
| Abdus Salam | Civil Engineering | UK |
| Sheikh Imran | Electronics Engineering | UK |
| Zahid Wadud | Electronics Engineering | UK |
| Engr. Yasir Malik | Electronics Engineering | UK |
| Alam Zaib | Electronics Engineering | UK |
| Farid Ullah (Ph.D) | Mechatronics Engineering | Canada |
| Muhammad Tahir Khan (Ph.D) | Mechatronics Engineering | Canada |
| Izhar UI Haq (Ph.D) | Mechatronics Engineering | UK |
| Shehzad Anwar Yousafzai (Ph.D) | Mechatronics Engineering | UK |
| Kamran Shah (Ph.D) | Mechatronics Engineering | UK |
| Muhammad Tufail (M.Sc) | Mechatronics Engineering | Bangkok |
| Bilal Ahmed (M.Sc) | Mechatronics Engineering | UK |
| Nisar Ahmad | Electrical, Electronics Engineering | UK |

Ph.D/M.Sc Scholars

| Name | Department | Country |
|-----------------------|---|---------|
| Rashid Rehan | National Institute of Urban Infrastructure and Planning | Canada |
| Salman Saeed | National Institute of Urban Infrastructure and Planning | Canada |
| Bilal Farooq | National Institute of Urban Infrastructure and Planning | Canada |
| Taimur Usman | National Institute of Urban Infrastructure and Planning | Canada |
| Gul Muhammad Khan | Electrical, Electronics Engineering | UK |
| Majad Ashraf Khan | Telecommunication Engineering | UK |
| Shahbaz Khan | Computer Information System Engineering | UK |
| Sahibzada Ali Mehmood | Electrical, Electronics Engineering | UK |
| Shoaib Khan | Telecommunication Engineering | UK |
| Iftikhar Ahmad Khan | Computer Software Engineering | UK |
| Khan Muhammad | Mining Engineering | UK |
| Ghousia Saeed | Architecture & Town Planning | UK |
| Noor Badshah | Mathematics | UK |

| Name | Department | Country |
|-------------------------|-------------------------------------|---------|
| Muhammad Idrees Khan | Civil Engineering | UK |
| Muhammad Ali Kamran | Mechanical Engineering | UK |
| Shahid Bashir | Electrical, Electronics Engineering | UK |
| Muhammad Alam Zaib Khan | Mechanical Engineering | UK |
| Sohail Akbar Khan | Industrial Engineering | Canada |
| Muhammad Imran Ahamed | Chemical Engineering | UK |
| Sobia Waqar | Mechanical Engineering | UK |
| Muhammad Adil | Civil Engineering | UK |
| Qaisar Iqbal | Civil Engineering | UK |
| Zia-ul-Haq | Agricultural Engineering | UK |
| Rawid Khan | Civil Engineering | UK |
| Muhammad Tariq Khan | Civil Engineering | UK |
| | | |

Academics

Annual Report

06-07



OUR VISION

Striving for the Highest Level of
Engineering Excellence

Research Activities

Annual Report

06-07

Ph.D Research Projects

| Name of Student | Title | Supervisor |
|---------------------------|---|---------------------------|
| Engr. Babar Nazir | MANET using Swam Intelligence | Prof. Dr. Azzam Ul Asar |
| Engr. Riaz Ul Hasnian | Shot Term Load Forecasting Using Hybrid Approach | Prof. Dr. Azzam Ul Asar |
| Engr. Amjad Ullah Khattak | Data Mining Technique on Load Forecasting | Prof. Dr. Azzam Ul Asar |
| Maj. Muhammad Ejaz | H8 Loop Shaping for a Missile System | Prof. Dr. M. Naeem Arbab |
| Engr. Faryal Awan | Image Processing using Water Marking Technique | Prof. Dr. M. Naeem Arbab |
| Engr. Ihsan-ul-Haq | Network Discovery in Future Heterogeneous Radio Access Networks | Prof. Dr. K.M. Yahya |
| Engr. Nisar Mohammad | Investigation of effective parameters for recovery of talc from talc-carbonate schist of Swat area using flotation and leaching techniques. | Prof. Dr. M. Mansoor Khan |
| Engr. Safi-ur-Rehman | Application of Operation Research Techniques of Production Scheduling of Cement Quarries | Dr. Waqar Ali Asad |
| Engr. Aman-Ul-Mulk | Design, Stability Analysis and Future trends of tunnels in N.W.F.P. | Prof. Dr. Noor Mohammad |
| Engr. Alam Zeb | High Speed Machining | Dr. M.A. Irfan |
| Engr. Sahar Noor | Scheduling of flexible manufacturing systems using artificial intelligence | Dr. Irfan Ullah |
| Engr. Ovais Mahfooz | Dynamic modeling of Wind Turbines Systems | Dr. Irfan Ullah |
| Engr. Masood ur Rehman | Effect of surface wear and fatigue gear failure of locally made self-propelled rotary hoe | Prof. Dr. Zahid Mahmood |

OUR VISION

Striving for the Highest Level of
Engineering Excellence

M.Sc Research Projects

| Name of Student | Title | Supervisor |
|--------------------------|---|-----------------------------------|
| Engr. Mujahid | Estimate of Ground Water balance for Peshawar region | Dr. Taj Ali Khan |
| Engr. Sheraz Khan | Implementation of Finite State Machines (FSM) for digital design using Virology | Dr. Inayatullah Khan Babar |
| Engr. Syed Ayaz Ali Shah | Interactive voice response with pattern recognition approach | Prof. Dr. Azzam ul Asar |
| Engr. Tariquallah Jan | TCP congestion control using a Fluid model | Dr. Syed Waqar Shah |
| Engr. Jamil Raza | Application of Genetic Algorithm in predecessor coding for the capacitated minium spanning tree using mat lab | Dr. Syed Waqar Shah |
| Engr. Muhammad Yasin | Response of Bolted joints under Multi-Harmonic Excitation | Prof. Dr. Irfanullah |
| Engr. Umer Ibrahim | Dynamic Fracture in Repair Prototype material | Prof. Dr. M.A. Irfan |
| Engr. Imdad Khan | Mechanical Properties of block masonry structural system | Dr. Qaisar Ali |
| Engr. Sardar Adnan Rafiq | Development of Low cost Treatment Technology for the Removal of Arsenic Engineering | Prof. Dr. M.A.Q. Jahangir Durrani |
| Engr. Muhammad Daood | Development of computer software for the Design of Water Treatment Plant | Dr. Daulat Khan |
| Engr. Rehanullah | Real-time facial geometry detection, recognition and tracking | Mr. Rehmanullah Kundi |
| Engr. Eesaha Akif | Design of a sun band coder that will decrease the original bit-rate of 64 knits/s | Dr. K. M. Yahya |

Research Activities

Annual Report

06-07



Research Activities

Annual Report

06-07

M.Sc Research Projects

| Name of Student | Title | Supervisor |
|--------------------------------|---|----------------------------|
| Engr. Nadia Zia | Design and simulate a 16 bit processor having accumulator architecture | Dr. K. M. Yahya |
| Engr. Nadir Khan | AdHoc Mullion Wireless Networking | Dr. Inayatullah Khan Babar |
| Engr. Hameed Gul | Analytical Approach to Electric Field Calculation in power cables | Dr. M. Naeem Arbab |
| Engr. Tajammul Hussain Bangash | Thermal Modeling of power Transformation | Dr. M. Naeem Arbab |
| Engr. Naeem Khan | Simulation of a wide range single phase converter for power factor correction (PFC) circuit | Dr. M. Naeem Arbab |
| Engr. Muhammad Ibrahim | Short range quarry planning and coal pile optimization by applying OR techniques | Dr. M. Waqar Ali |
| Engr. Iqbal Zeb | Pond Development and Management for provision of safe drinking water in rud-kohi area of D.I.Khan | Dr. Taj Ali Khan |

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Faculty Research Projects

| Title | Principal Investigator |
|--|---------------------------------|
| Investigation into incidence of pneumoconiosis and related disease among mine workers of NWFP. | Prof. Dr. Khan Gul Jadoon |
| Removal of toxic elements from bentonites clay used for refining of edible vegetables and animal oils, fats and pharmaceuticals. | Prof. Dr. Mohammad Mansoor Khan |
| Development of economic block model for cement quarry operations | Dr. M. Waqar Ali |
| Testing facility for indigenous development of micro-hydro turbines. | Prof. Dr. Irfan Ullah |
| Design and implementation of secure routing protocol for mobile Ad Hoc Network. | Dr. M. Inayatullah Khan Babar |
| Design and implementation of fuzzy find matching system for medical information repositories. | Dr. M. Inayatullah Khan Babar |
| Seismic performance evaluation and improvement of stone masonry buildings. | Dr. Qaisar Ali |
| Development of challenging laboratory exercises/manual for wired and wireless networks/protocols based on OPNET modeler. | Prof. Dr. K. M. Yahya |

Research Activities

Annual Report

06-07



Research Activities

Annual Report
06-07

Faculty Research Publications

| Author (s) | Topic | National/International Journals & Conferences |
|--|---|--|
| Prof. Dr. S. M. Siddique | Literature review of Mobile & Geo-Location techniques | AEESEAP Conference, Malaysia |
| Prof. Dr. S. M. Siddique | GSM Security Issue and Challenges | IEEE-SNDP Conference 2006, USA |
| Assist. Prof. Ihsan-ul-Haq | Network Discovery Approach in Heterogeneous Radio Access Network | ICET Conference 2006, Pakistan |
| Assist. Prof. Ghulam Mubashar & Assist. Prof. Ihsan-ul-Haq | Dynamic Feedback Controller for Leader Follower Approach for Unicycle Robot | ICET Conference 2006, Pakistan |
| Prof. Dr. Hisham El-Dessouky | Second Law of Analysis of Latent Heat Energy Storage System | International Journal of Heat and Mass Transfer, 2006 |
| Prof. Dr. Hisham El-Dessouky | Flash Evaporation in Superheated Water Liquid Jet, Desalination. | In press, 2006 |
| Prof. Dr. Hisham El-Dessouky | An experimental study of Spray Flash Evaporation in Superheated Liquid Jet, Desalination. | In press, 2006 |
| Dr. Waqar Ali Asad | Optimum cutoff grade policy for open pit mining operation through net present value algorithm considering metal price and cost escalation | Engineering computations (under review) |
| Dr. Waqar Ali Asad | Multi-period Cement Quarry Production Planning through Sequence Teaching and Sequencing Algorithm | Journal of Mining Science (under review) |
| Hamid Ullah, Dr. M.A. Irfan, and Prakash, V. | State and Rate Dependent Friction Laws for Modeling High Speed Frictional Slip at Metal-on-Metal Interfaces | Journal of Tribology, January 2007 Vol. 129, Issue 1, PP 17-22 |
| Ullahm, H., Bohez, E. And Dr. M.A. Irfan | Assembly Features: Definition, Classification and Instantiation | ICET 2006, IEEE Conference, 13-15 November 2006. |
| Ullahm, H., Bohez, E. And Dr. M.A. Irfan | Mathematical Modeling of Feature Conversion for Integration of CAD and Assembling Planning" | 08-11th November 2006, Vienna, Aurtria, EU. |

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Faculty Research Publications

| Author (s) | Topic | National/International Journals & Conferences |
|---|---|--|
| Engr. Hamid Ullah, Dr. M. A. Irfan and Bohez, E | Review of research in feature-based design and manufacturing | CAD 06 Conference, June 19-23, 2006 Phuket, Thailand. |
| Dr. Irfan Ullah | Scheduling tool for flexible manufacturing systems using hybrid genetic algorithm" | Second International Conference Nov. 13-14, 2006. NWFP UET. |
| J. Blum, P. Delaigue, R. Sayed, and A. Eskandarian | Driving Simulator Enhancements for the Evaluation of intelligent Speed Adaptation Systems | STISIM Users Conference, Cambridge, MA, October 26-27, 2006. |
| Engr. Riaz A Sayed, Pierre Delaigue, Azim Eskandarian, & Kennerly Digges | Vehicle Dynamic Simulation for Reconstruction of Rollover Crashes" Proceedings of IMECE2006 ASME International Mechanical Engineering Congress and Exposition | Exposition November 5-10, 2006. Chicago, Illinois, USA. |
| Engr. Riaz Sayed, et.al | Developmental of an Intelligent Multimode Speed Adaptation System | April 16-19, 2007, Detroit, Michigan, USA. |
| Engr. Syed Muhammad Ali | Performance of engineered and Non-engineered Structures during the October, 8th Kashmir Earthquake | 8th National Conference in Earthquake Engineering Research (8NCEE), USA |
| Jehangir Khan Sial, Daulat Khan, Khuwaja Altaf Hussain, Zahid Mahmood, Ahmad Shafee | Fuel Efficiencies of Urban Wagons | Vol. No. 19-1 Scientific Khyber, 2006 |
| Jehangir Khan Sial, Khuwaja Altaf Hussain, Daulat Khan, Zahid Mahmood, Ahmad Shafee | Investigations of smook Opacity in Commercial Trucking | Vol. No. 19-1 Scientific Khyber, 2006 |
| Dr. Daulat Khan, Rumana Riffat | Strategies for improving environmental impact assessment process in Pakistan | Journal of Engineering & Applied Sciences (JEAS) Vol. 25 N1 2006. |
| Rumana Riffat, Dr. Daulat Khan | An Evaluation of the Environmental Impact Assessment in Pakistan | Journal of Applied Sciences in Environmental Sanitation (ASES) Vol. 1, Jan-Dec 2006, Indonesia |
| Sabir. G.K., Rohullah, A.Malik, P. Qaiser and M. Ibrar | Assessing maize yield and quality as affected by Zn as soil foliar application | Sarhad Journal of Agricultural. Vol. 22 No. 3, 2006 |
| Dr.Zahid. M., A. Malik, K. Mazzullah, A. Masood and M. Asif | Performance evaluation of solar dryers for drying onions in NWFP | Sarhad Journal of Agricultural. Vol. 22 No. 1, 2006. |

Research Activities

Annual Report

06-07



OUR VISION

Striving for the Highest Level of
Engineering Excellence

Research Activities

Annual Report
06-07

Faculty Research Publications

| Author (s) | Topic | National/International Journals & Conferences |
|---|--|--|
| Dr. Akhtar Naeem Khan & Assist. Prof. Irshad Ahmad | Kinematic Seismic Response of Piles in Layered Soil Profile. | International Journal Vol. 25 |
| Engr. Amjad Naseer, Engr. Abid Ali Shah & Engr. Shaukat Ali Khan | Design proposal for Load Transfer Mechanism of Column-Slab Joints | International Journal Vol. 25 |
| Dr. Akhtar Naeem Khan, Assist. Prof. M. Javed, G.Magenes & A. Penna | Behaviour of Masonry Structures during the Kashmir 2005 Earthquake | First European Conference on Earthquake Engineering & Seismology, Switzerland. |
| Dr. M. Naeem Arbab | Loop-Shaping for Missile Control System | ICET 2006, IEEE Conference, 13,14 November 2006. |
| Dr. M. Naeem Arbab | Tuning PID Controller using Loop-shaping and Genetic Algorithm | ICET 2006, IEEE Conference, 13,14 November 2006. |
| Dr. Inayatullah Khan Babar | Optimized QoS Models for small size mobiles AdHoc Networks | ICET 2006, IEEE Conference, 13,14 November 2006. |
| Dr. Inayatullah Khan Babar | A Face Detection System Using Neural Network Approach | World COMP, USA 2006 |
| Dr. Syed Waqar Shah | Securing JAVA based mobile agents through Byte Code Obfuscation Techniques | IEEE INMIC, December 2006 |
| Dr. Syed Waqar Shah | Weight Selection in H- \dot{I} Loop Shaping Using Lead/Lag compensators | ICET, IEEE Conference, 13,14 November 2006. |
| Dr. Syed Waqar Shah | Identification and Removal of barriers for Renewable Energy Technologies in Pakistan | ICET, IEEE Conference, 13,14 November 2006. |
| Dr. Inayatullah Khan Babar | Ab Automated Grade of Service Measuring System | ICET, IEEE Conference, 13,14 November 2006. |
| Engr. Imran Ashraf & Saad Mubeen | Design of an 8-bit RISC processor and its implementation on FPGA | IEEE Multi topic International Symposium 14, 15th April-2006, Karachi |

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Faculty Research Publications

| Author (s) | Topic | National/International Journals & Conferences |
|---|--|--|
| Prof. G. Qasim et.al | Inverted antenna for mobile communication Part-II | APCC Busan IEEE Korea, Aug. 31st September 2006 |
| Dr. Siraj-ul-Islam S.I.A. Tirmizi | Non-Polynomial Spline Approach to the Solution of a System of Second-Order Boundary-Value Problems | Applied Mathematics Computation, Vol .173, issue-2, 2006 |
| Dr. Siraj-ul-Islam S.I.A. Tirmizi and Saadat Ashraf | A class of methods based on non-polynomial spline functions for the solution of special fourth-order boundary-value problems with engineering applications | Applied Mathematics computation, Vol .174, issue-2, 2006 |
| Dr. Siraj-ul-Islam with M.A. Khan, S.I.A.Tirmizi, E.H.Twizell & Saadat Ashraf | A class of methods based on non-polynomial sextic spline functions for the solution of special fifth-order boundary-value problems | Journal of Mathematical Analysis and its Applications Vol .321, 2006 |
| Dr. Siraj-ul-Islam with M.A. Noor, S.I.A. Tirmizi & M.A. Khan | Quadratic non-polynomial spline approach to the solution of second-order boundary-value problems | Applied Mathematics computation, Vol .179, issue-1,1 2006 |
| Dr. Siraj-ul-Islam with M.A. Khan | A class of methods based on non-polynomial sextic spline functions for the solution of special fifth-order boundary-value problems | Applied Mathematics computation, Vol .181, issue-1,1 2006 |
| Dr. Siraj-ul-Islam with M.A. Khan & S.I.A. Tirmizi | A smooth approximation for the solution of special third-order nonlinear boundary-value problems | International Journal of Computation Maths., U.K. 2006 |

Research Activities

Annual Report

06-07



Financial Statements

Annual Report
06-07

| Head of Income & Expenditure | Actual for 2004-2005 | Budget estimates for 2005-06 | Revised | Estimates | 2005-2006 | Budget estimates for 2006-2007 |
|---|-----------------------|------------------------------|------------------------------|--------------------------------|---------------------|--------------------------------|
| | | | actual from 7/2005 to 3/2006 | for probables for 4,5 & 6/2006 | Total columns 4 & 5 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A) INCOME | | | | | | |
| 1. Opening Balance | 9,823,131.68 | 604,288 | 2,325,243 | 0 | 2,325,243 | 3,698,934 |
| 2. Govt Grant in Aid | 180,000,000.00 | 235,000,000 | 152,750,000 | 82,250,000 | 235,000,000 | 290,956,000 |
| 3. Research Grant | 0 | 0 | 0 | 2,500,000 | 2,500,000 | 2,500,000 |
| 4. University own Income | 54,319,443.15 | 59,761,000 | 35,716,000 | 25,583,425 | 61,299,425 | 72,884,550 |
| 5. Allocation from Reserve Fund | 0 | 13,568,133 | 0 | 5,000,000 | 5,000,000 | 19,206,874 |
| Total (A) | 244,142,574.83 | 308,933,421 | 186,140,757 | 115,333,425 | 301,474,182 | 389,246,358 |
| B) EXPENDITURE | | | | | | |
| 1. Salaries and Allowances | 140,683,862.000 | 209,342,106 | 141,571,348 | 45,901,799 | 187,473,147 | 283,976,358 |
| 2. Other Expenses | 105,783,955.50 | 99,591,315 | 67,589,488 | 40,212,613 | 107,802,101 | 102,770,000 |
| 3. Research Grant (transfer to Account) | 0 | 0 | 0 | 2,500,000 | 2,500,000 | 2,500,000 |
| Total (B) | 246,467,817.50 | 308,933,421 | 209,160,836 | 88,614,412 | 297,775,248 | 389,246,358 |
| C) Closing Balance (A-B) | 2,325,242.67 | 0.00 | 23,020,079 | 26,719,013 | 3,698,934 | - |

OUR VISION

Striving for the Highest Level of
Engineering Excellence

Facts & Figures

Annual Report

06-07

Syndicate Meetings

71st meeting held on 18-03-2006

72nd meeting held on 15-07-2006

Finance & Planning Committee Meetings

63rd meeting held on 04-02-2006

64th meeting held on 03-06-2006

Academic Council Meetings

53rd meeting held on 13-02-2006

54th meeting held on 15-04-2006

BOASAR Meetings

22nd meeting held on 19-06-2006

Convocation

10th Convocation for the session 2005-2006 held on 22-11-2006



Facts & Figures

Annual Report
06-07

Our teaching faculty of about 289, cover a wide range of academic disciplines, professions and jobs. Together, they constitute the University's most important resource. The tables below show total and fresh appointed faculty during the last year.

Total Strength (all campuses)

| | |
|------------------|-----|
| Teaching Staff | 289 |
| Laboratory Staff | 136 |

Regular appointments (2006)

| Campus | Professor | Assoc.Prof. | Assist. Prof. | Lecturer |
|------------|-----------|-------------|---------------|----------|
| Peshawar | 1 | 1 | 9 | 6 |
| Mardan | – | – | – | – |
| Bannu | – | – | – | – |
| Abbottabad | – | – | – | – |

Contract appointments (2006)

| Campus | Professor | Assoc.Prof. | Assist. Prof. | Lecturer |
|------------|-----------|-------------|---------------|----------|
| Peshawar | – | – | 6 | 59 |
| Mardan | – | – | 4 | 12 |
| Bannu | – | 1 | 2 | 23 |
| Abbottabad | – | – | – | 20 |

Hostels at a Glance

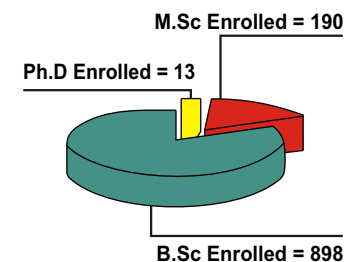
The University has accommodated more than 1300 students in its hostels at Peshawar Campus. During the year all the rehabilitative work including white wash and flooring was completed. Moreover, in order to meet the increasing demand for accommodation a separate girls hostel is being constructed at Peshawar Campus which will house 100 female students. The hostel administration is fully committed to provide proper mess services to the boarders as well as keeping an eye over any political activities in the hostels.

Student intake (Undergraduate Programme 2006-07)

| Discipline | Male | Female | Total |
|-----------------------------|------------|-----------|------------|
| PESHAWAR CAMPUS | | | |
| Electrical Engineering | 111 | 13 | 124 |
| Computer System Engineering | 79 | 06 | 85 |
| Civil Engineering | 95 | 07 | 102 |
| Mechanical Engineering | 125 | 06 | 131 |
| Chemical Engineering | 56 | 02 | 58 |
| Mining Engineering | 22 | – | 22 |
| Agricultural Engineering | 20 | 02 | 22 |
| BS (CS) & BS (IT) | 26 | 04 | 30 |
| Industrial Engineering | 29 | 01 | 30 |
| MARDAN CAMPUS | | | |
| Computer Software Engg. | 31 | 01 | 32 |
| Telecommunication Engg. | 52 | 05 | 57 |
| BANNU CAMPUS | | | |
| Electrical Engineering | 47 | 02 | 49 |
| Civil Engineering | 48 | 01 | 49 |
| BS (CS) (IT) | – | – | – |
| ABBOTTABAD CAMPUS | | | |
| Architecture | 44 | 05 | 49 |
| Electronics Engineering | 54 | 04 | 58 |
| TOTAL | 839 | 59 | 898 |

Student intake (M.Sc & Ph.D 2006-07)

| | |
|----------------|-----|
| Ph.D Enrolled | 13 |
| M.Sc. Enrolled | 190 |



OUR VISION

Striving for the Highest Level of
Engineering Excellence

CONTACTS

NWFP University of Engineering & Technology,
Peshawar-Pakistan
Phone # 9216796-98

Engr. Syed Imtiaz Hussain Gilani
Vice Chancellor
Phone: (92-91) 9216493-4

Lt. Col. (R) Imtiaz Ahmad Khan
Registrar
Phone: (92-91) 9216496
Email: registrar@nwfpuet.edu.pk

Prof. Dr. Muhammad Mansoor Khan
Dean, Faculty of Engineering
Phone: (92-91) 9216495
Email: dean@nwfpuet.edu.pk

Muhammad Sarwar Khan
Director Finance
Phone: (92-91) 9216497
Email: df@nwfpuet.edu.pk

Prof. Syed-ul-Ibrar
Provost
Phone: (92-91) 9216505

Muhammad Nisar Khan
Controller of Examination:
Phone: (92-91) 9216794

Dr. Waqar Ali Asad
Director Undergraduate Studies
Phone: (92-91) 9216796-8

Prof. Dr. Azzam-ul-Asar
Director Post Graduate Studies:
Phone: (92-91) 9216081

Prof. Dr. Khan Gul Jadoon
Secretary BOASAR
Phone: (92-91) 9216791

Ms Shamaila Farooq
Director Media and Public Relations
Phone: (92-91) 9216043
Email: dirmedia@nwfpuet.edu.pk

CHAIRMEN:

Prof. Dr. Zahid Mahmood
Department of Agricultural Engineering
Phone: (92-91) 9216500

Prof. Dr. Hisham El Dessouky
Department of Chemical Engineering
Phone: (92-91) 9218180

Prof. Dr. Akhtar Naeem Khan
Department of Civil Engineering
Phone: (92-91) 9216775

Prof. Dr. K.M. Yahya
Department of Computer Systems Engineering
Phone: (92-91) 9216590 Fax: (92-91) 9216589

Prof. Abdul Mutalib
Department of Electrical Engineering
Phone: (92-91) 9216498

Dr. Iftikhar Hussain
Department of Industrial Engineering
Phone: (92-91) 9216465

Prof. Dr. M.A. Irfan
Department of Mechanical Engineering
Phone: (92-91) 9216499

Prof. Dr. Khan Gul Jadoon
Department of Mining Engineering
Phone: (92-91) 9216501

Prof. Khalid Pervez
Department of Basic Sciences & Islamiat
Phone: (92-91) 9216502

Dr. M. Inayatullah Khan Babar
Department of CS & IT
Phone: (92-91) 9216590

CAMPUSES:

Engr. Mehamood Jan Babar
Co-ordinator Mardan Campus:
Phone: (92-931) 9230295

Prof. Syed Mussarat Shah
Co-ordinator Abbottabad Campus:
Phone: (92-992) 381700

Engr. Mohib Ali Shah
Co-ordinator Bannu Campus:
Phone: (92-928) 614259

With compliments

*Directorate of Media & Public Relations,
NWFP University of Engineering & Technology Peshawar.*

www.nwfpuet.edu.pk
dirmedia@nwfpuet.edu.pk
Tel: (92-91) 9216796-8
Fax: (92-91) 9216043 P.O Box # 814

Annual Report

06-07

OUR VISION

Striving for the Highest Level of
Engineering Excellence