ANNUAL REPORT 2016-17

ARA

NED was established in **1921** as Engineering College. It is one of the oldest Engineering institution in Pakistan.



Dr. Sarosh Hashmat Lodi

It is my immense pleasure to share some of the NED University highlights from the year 2016-17.

This year, admissions in two new Programmes - 'Data Engineering' and 'Economics and Finance' - were added to already running 86 Programmes. Additionally, four new postgraduate specializations were approved for fresh intakes during 2017-18 in the areas of Petroleum Engineering and Communication Systems.

NED University enrolment reached 12,261 this year. 3,766 students were admitted while 2,456 students graduated from this University including two PhD scholars. The University continues to attract PhD qualified faculty and currently 158 of the faculty members are PhD holders. We are committed to invest heavily in capacity building which is evident from the fact that currently 89 faculty members are pursuing PhD studies – several of them at top universities of the world.

There are currently 87 research projects in progress worth Rs. 435 Million - 40% of which are international grants. Faculty members of NED University remain actively engaged in outreach and networking to create new opportunities. This year, 51 faculty members proceeded abroad on staff mobility and conference travels. More than 200 papers were published in foreign research journals, out of which 151 were JCR indexed. NED University also publishes three high quality research journals, including NED University Research Journal which is HEC recognized in 'X' category. The University organized seven international conferences where, in addition to our national delegates, several prominent international speakers also participated. 82 events including seminars and workshops were organized on campus by various societies and departments. Two faculty members were awarded letters of appreciation by the President of Pakistan for their contribution in developing Fire Safety Provisions of Building Code of Pakistan.

Providing fair access and opportunities to student body remains one of our top priorities. This year, 15 students went abroad on exchange Programmes, while 107 students participated in various international competitions abroad. Also, 826 students were awarded scholarships for studying in various programmes and 2,275 students availed industrial placements in 615 organizations.

The quality management, control and assurance continued to play its vital role. Thirty extensive training sessions were organized to ensure capacity building of the faculty and staff members. During the reporting period, the QEC has been assigned a score of 90.65% with a place in 'W' Category by the Quality Assurance Agency (QAA) of the HEC.

ORIC continues to grow at NED University as it is playing a key role in supporting commercialization potential. It is working hard in developing an entrepreneurially conducive environment on campus. Eleven spin offs have now registered with ORIC in the second batch.

NED University enjoys a very healthy alumni engagement. Associations around the world continued to launch several supporting initiatives for the betterment of this University including scholarships and awards. One of the notable alumni contributions was a frequently organized webinar series which featured prominent speakers working in cutting edge domains around the world. Building Information Modeling (BIM) Lab is a first Centre of its kind in Pakistan established in collaboration with NED Alumni Association of Tri-State (NEDATS) with the total cost of Rs 3.5 million. Industrial collaborations continue to grow, as is showcased by establishment of state of the art K-Electric laboratory at Department of Electrical Engineering.

Development at NED University is growing at a rapid pace. In addition to already running two mega projects of about Rs. 3 billion, a new development project for the establishment of Department of Food Engineering worth Rs. 300 million has been approved by Sindh Government. Additionally, NED University has also become founding partner of National Centre for Artificial Intelligence.

We now move into 2017-18 with focus on further strengthening our infrastructure, increasing our outreach and enhancing academic and research quality. There are several on-going initiatives, for which we are thankful to ALLAH TAALA and we pray for our pledges to be fulfilled. Ameen.

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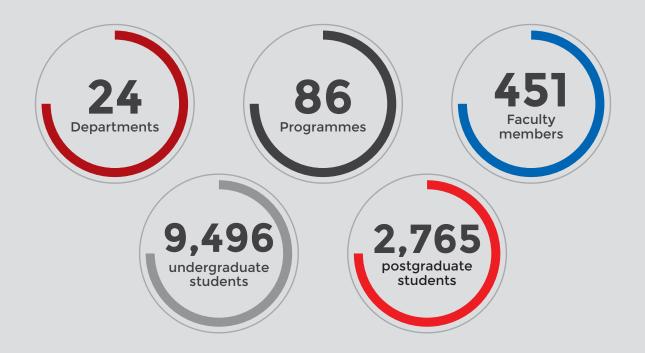
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ACADEMICS



PROGRAMMES AT **NED UNIVERSITY**

NED University has 24 teaching departments from six faculties, offering 29 undergraduate and 57 postgraduate Programmes.

	Departments	Bachelor Programmes	Masters Programmes
rchitecture	Civil Engineering	BE Civil Engineering BE Construction Engineering	M. Engg. Structural Engineering M. Engg. Geo-Tech Engineering M. Engg. Transportation Engineering M. Engg. Coastal and Harbour Engineering M. Engg. Coastal & Water Resources (Coastal Engg.) M. Engg. Coastal & Water Resources (Water Resources Engg.) MEM Construction Management MEM Water Resources Management
Civil Engineering and Architecture	Earthquake Engineering		M. Engg. Structural Earthquake Engineering M. Engg. Disaster Management and Sciences
vil Engi	Urban and Infrastructure Engineering	BE Urban Engineering	MEM Transportation Infrastructure Management
Ü	Environmental Engineering		M. Engg. Environmental Engineering MEM Environmental Management
	Petroleum Engineering	BE Petroleum Engineering	M. Engg. Reservoir Engineering M. Engg. Drilling Engineering M. Engg. Production Engineering
	Architecture & Planning	Bachelor of Architecture BS Development Studies	Master of Urban & Regional Planning M. Arch. Architecture MS Real Estate Management

	Departments	Bachelor Programmes	Masters Programmes
Engineering	Mechanical Engineering	BE Mechanical Engineering	M. Engg. Design M. Engg. Energy Systems M. Engg. Mechatronics M. Engg. Renewable Energy MEM Energy and Plant Management
Mechanical and Manufacturing Engineering	Industrial & Manufacturing Engineering	BE Industrial & Manufacturing Engineering BS Management Science	M. Engg. Manufacturing Engineering MEM Industrial Management MEM Quality Management MEM Supply Chain Management
chanical and I	Automotive & Marine Engineering	BE Automotive Engineering	M. Engg. Automotive Design M. Engg. Automotive Manufacturing M. Engg. Computational Engineering
Me	Textile Engineering	BE Textile Engineering BS Textile Sciences	M. Engg. Textile Engineering MEM Textile Management MS Textile Management

PROGRAMS AT NED UNIVERSITY

	Departments	Bachelor Programmes	Masters Programmes
ngineering	Electrical Engineering	BE Electrical Engineering	M. Engg. Electrical Power Systems M. Engg. Electrical Machines & Drives M. Engg. Control Systems MEM Energy Management
Electrical and Computer Engineering	Computer & Information Systems Engineering	BE Computer Systems Engineering	M. Engg. Computer Architecture & Systems Design M. Engg. Computer Network & Performance Evaluation MS Data Engineering and Information Management
Electrica	Electronic Engineering	BE ElectronicEngineering BE Telecommunications Engineering	M. Engg. Micro System Design M. Engg. Industrial Electronics M. Engg. Telecommunications Engineering MS Telecommunications Systems

ring	Departments	Bachelor Programmes	Masters Programmes
Engineering	Materials Engineering	BE Materials Engineering	M. Engg. Materials Engineering
Process En	Metallurgical Engineering	BE Metallurgical Engineering	-
and	Chemical Engineering	BE Chemical Engineering	M. Engg. Chemical Engineering MEM Chemical & Process Management
Chemical	Polymer & Petrochemical Engineering	BE Polymer & Petrochemical Engineering	M. Engg. Polymer Engineering

ring	Departments	Bachelor Programmes	Masters Programmes
al Engineering	Biomedical Engineering	BE Biomedical Engineering	M. Engg. Biomedical Engineering
Biomedical	Food Engineering	BE Food Engineering	-

PROGRAMS AT NED UNIVERSITY

ties	Departments	Bachelor Programmes	Masters Programmes
and Humanities	Computer Science & Software Engineering	BE Software Engineering BS Computer Science & Information Technology	MS Computer Science & IT MS Information Security
	Mathematics	BS Computational Finance	MS Applied Mathematics
Science	Chemistry	BS Industrial Chemistry	MS Industrial Chemistry
ation	Physics	BS Applied Physics	MS Physics
Information	Humanities	BS English Linguistics BS Economic & Finance	MS Appiled Linguistics MS Economics and Finance

NEW PROGRAMMES LAUNCHED

During year 2016-17, two new Programmes offered admissions for the first time:

- BS Economics and Finance, offered by Department of Humanities
- MS Data Engineering and Information Management, offered by Department of Computer and Information Systems Engineering

Additionally, during this year, four new postgraduate specializations have been approved to be offering admissions during coming year:

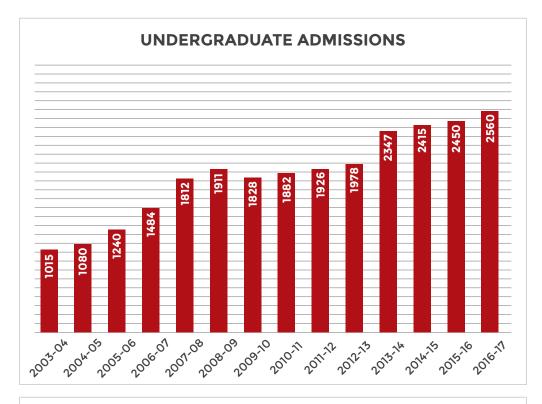
- MS Telecommunication Systems, offered by Department of Electronic Engineering
- M.Engg. Reservoir Engineering, M. Engg. Drilling Engineering and M. Engg. Production Engineering, all offered by Department of Petroleum Engineering

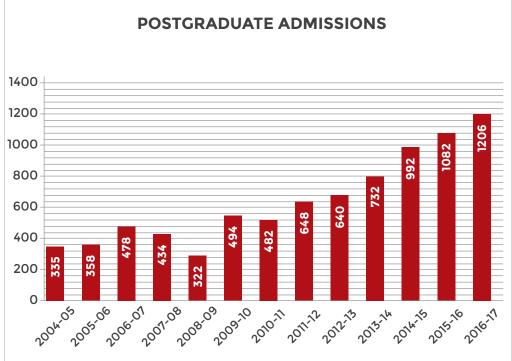
ADMISSIONS

A total of **2560** candidates succeeded in securing admissions in undergraduate Programmes. A healthy **40%** proportion is female students. This year's intake is an increase of **4%** from **2450** admissions offered last year in 2015-16.

In various postgraduate Programmes, a total of **1206** students received admissions, which is an increase of about **11%** from **1082** last year. This year intake consisted of about **22%** female cohort.

This year 23 fresh PhD scholars were admitted, taking total existing enrolment to 122.



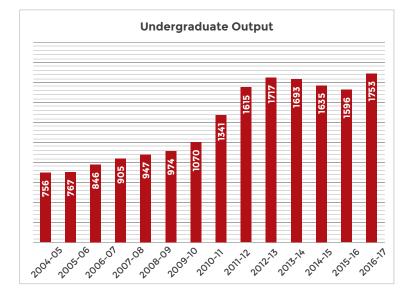


CONVOCATION 2017

The Convocation 2017 of the NED University of Engineering and Technology was held on Tuesday, 14th March 2017. Former speaker of the National Assembly, Engr. Illahi Bux Soomro, was the chief guest. He had also served as the principal of the NED Engineering College from 1967 to 1969.

In all, 2,456 degrees were conferred during this year. Among the degree holders, 1,753 were undergraduate, while 701 received masters degrees. Two scholars - Raheela Asif and Farid Ahmed - received PhD degrees during convocation 2017.

This year's graduation saw 15% increase from previous year graduation of 2,133 students.







ENROLMENT

Total student enrolment at NED University currently stands at 12,261.

This year 9,496 undergraduate students were enrolled, of which 3,363 (35%) were female students. 2,643 masters students were enrolled during 2016-17, of which 595 (22.5%) were female students. PhD enrolment at NED University currently stands at 122 scholars.

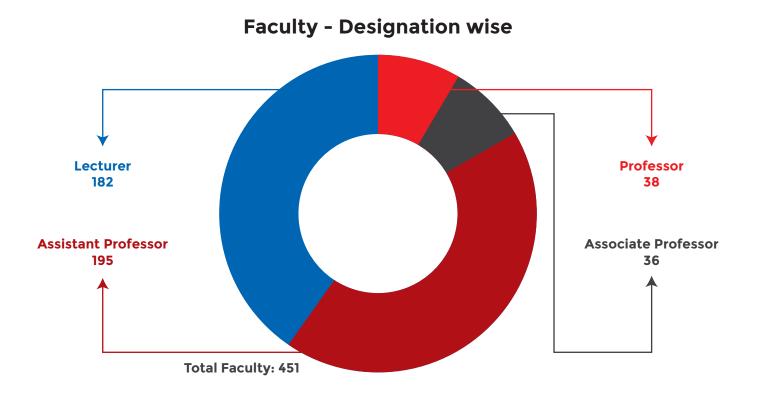
	EIRKOEMEINT				
		АСТ	UAL		PLANNED
Programme	2013-14	2014-15	2015-16	2016-17	2017-18
Undergraduate Programmes	7801	8515	8951	9496	9600
Masters Level Programmes	1145	1913	2336	2643	2700
PhD Programmes	69	89	99	122	150
Total	9015	10517	11386	12261	12450

ENROLMENT

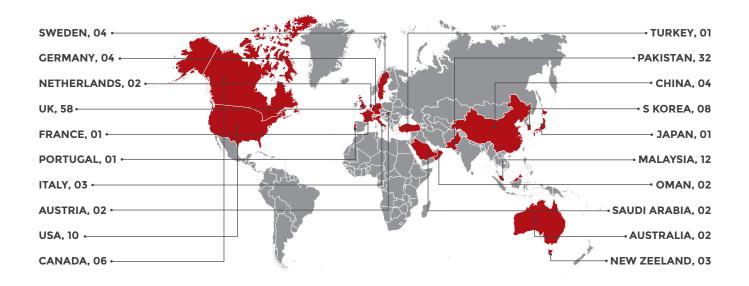


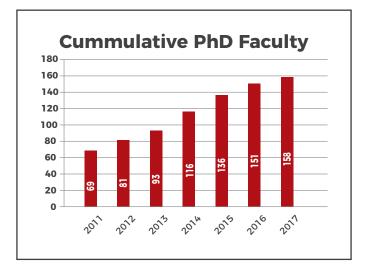
FACULTY

There are a total of 451 faculty members at NED University, out of which 158 (35%) are PhD holders. The designation wise break up of Faculty is as follows:



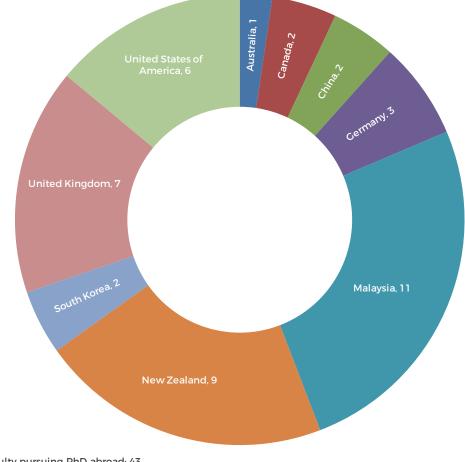
NED University strives to maximize international diversity including when it comes to acquirement of qualifications. The map below illustrates the geographical statistics pertaining to PhD faculty at NED University.





The number of PhD qualified faculty over the years is shown in the chart below.

There are currently 89 faculty members pursuing PhD; 43 of those are doing so abroad in nine different countries.



Faculty pursuing PhD abroad

Number of Faculty pursuing PhD abroad: 43

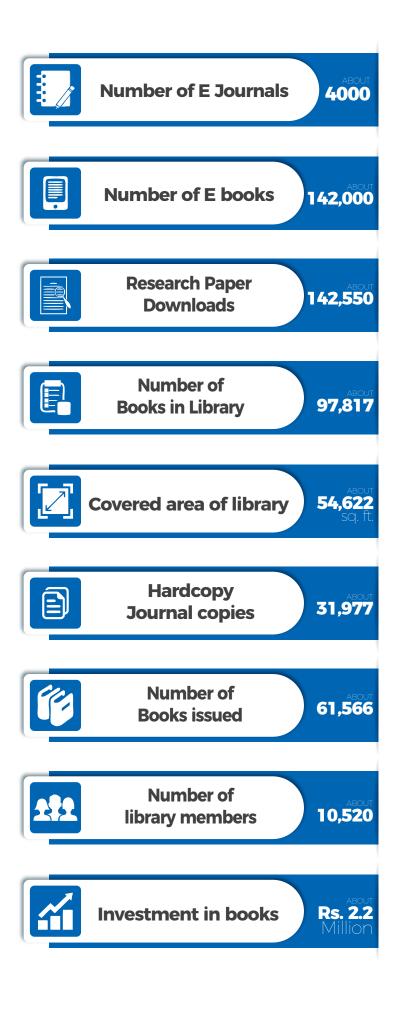
* A further 46 faculty members are pursuing PhD indigenously

ENGR. ABUL KALAM LIBRARY

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NED University is proud to possess a well-equipped and fully computerized library. It is the locust for imparting in depth and up to date knowledge in related technical and research fields. The Engr. Abul Kalam library devotes considerable efforts and resources to the development of a comfortable educational environment. It is deeply committed to its students and is pledged to excellence in education.







87 ongoing projects
Rs. 435 million ongoing projects grant
12 state of the art research centres
202 papers published in International Journals
07 international conferences

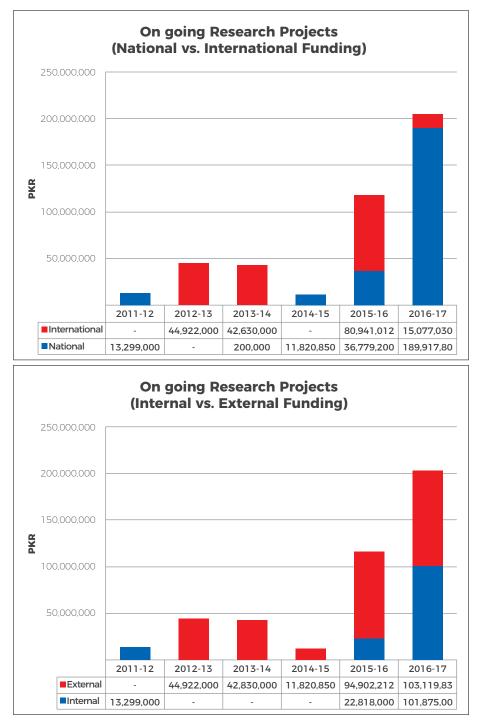
RESEARCH PROJECTS

Research remains at the forefront of the NED University focus. Faculty competes extensively in national and international RFPs, and as a result a healthy number of research projects are currently underway in state of the art domains of engineering and technology.

In total, 87 research projects are currently on-going worth Rs. 435 Million.

In 2016-17, 47 fresh projects were won by our faculty members worth Rs. 205 Million. These projects also include nine NRPU grants awarded to NED University this year with a healthy 37% proposal success rate.

NED University research project portfolio remains diverse. Of all ongoing projects 42% funding is International, while 68% research funding is from external organizations. Below is a year wise illustration of on-going research projects.



RESEARCH CENTRES

NORWEGIAN CENTRE OF PETROLEUM STUDIES

The ground breaking ceremony of Norwegian Centre of Excellence in Petroleum Studies (NCEPS) was held in January 2017. This Centre is being established with the cost of PKR 44.924 M in collaboration with Government of Kingdom of Norway. As part of the project of this project Pak-3004, Pak-Norway Institutional Development Programme having cost NOK.2.917 M is anticipated to conclude in June 2017 with the following milestones:

 Receiving of MS degree in petroleum engineering from Norwegian University of Science & Technology (NTNU), Norway by 03 Faculty members and the fourth one is expected to receive his degree by June 2017.



- Four faculty members received one month training in teaching and research from NTNU and one on drilling simulator from Gulf Technical & Safety Training Centre (GTSC) at Abu Dhabi.
- Strengthening of department seminar library and development of video conferencing facility at the department.
- Development of Master Programme (to be offered from Fall Semester 2017)
- Strengthening of laboratory resources.
- Transfer of Technology for class room teaching
- Development of Sustainable linkages with NTNU

This Centre is being headed by Prof. Dr. Abid Murtaza, Professor and Chairman at Petroleum Engineering.

RESEARCH CENTRE FOR ARTIFICIAL INTELLIGENCE

Research Centre for Artificial Intelligence (RCAI) at NED University has evolved from Koshish Foundation Research Lab in response to extensive local development in AI domain. The Centre aims to promote and contribute towards AI in Pakistan's perspective and priorities, while also providing training base at various levels, providing consultancy support to both industry as well as government, and maximize Pakistan's participation in International AI community networks. The Centre targets application areas in Building Infrastructure, Transport, Robotics, Decision Support Systems for national and institutional planning and policies, Finance, Water and food resources, Energy, Smart Grid and Cyber Physical and Security Systems. Right now, the Centre has students from PhD, Masters, and Bachelors carry out research work under various projects. In addition to AI, the Centre also has expertise in associated domains including IoT- Internet of things, Machine learning, Product design, Embedded System, Web development, Desktop Applications, Android Applications, PCB Designing etc. The Centre has strong collaboration with German Centre for Artificial Intelligence (DFKI).

This Centre is being headed by Dr. Muhammad Khurram, Associate Professor at Department of Computer and Information Systems Engineering-.

BUILDING INFORMATION MODELING CENTRE (BIM)

BIM is a state of the art Centre, which provides free service to industrialists for resolving pre-construction issues of high rise and complex structured buildings related to wind zones, emergency exits and temperature through developing visual models of the projects. The Centre is providing a platform to bring all engineers including civil, mechanical, electrical, structural and material to work together under the same umbrella while preparing building modeling using software that adds everything. This is first Centre of its kind in Pakistan established in collaboration with NED Alumni Association of Tri-State (NEDATS) with the total cost of Rs 3.5 million.

This Centre is managed by Dr. Rizwan Farooqui, Professor and Co-Chairman at Department of Civil Engineering.

COWASJEE EARTHQUAKE STUDY CENTRE (CESNED)

CESNED was established in 2001 after the devastating Bhuj earthquake. The objectives of CESNED include housing national and global data pertaining to earthquake and act as a centre for disseminating accumulated knowledge, as well to respond to emergency needs and be able to provide guiding principles for pre and post-earthquake mitigation. CESNED has been a hub of earthquake related activities since its establishment. It also publishes of a biannual newsletter. The vital role played by CESNED after the October 2005 Kashmir earthquake led to its recognition as one of the two earthquake study centres in the Country. CESNED is funded by HEC for its future development as an International Centre.

The Centre is currently being administered by Dr. Muhammad Masood Rafi, Professor and Chairman, Department of Earthquake Engineering.

SHAKE TABLE FACILITY

The Shake Table laboratory is a state of the art facility which is available in the Department of Earthquake Engineering. The facility is used to simulate real time earthquake ground motion to record the dynamic response of a given structure placed on the Seismic table. The Seismic Table has a linear hydraulic actuator with a fatigue rating of 110 kip (500 kN). The actuator is attached to a 3 M x 3 M table which is guided by linear bearings. The stroke capability of the unit is 300 mm with a nominal peak velocity of 1 meter/sec and average velocity of 0.5 meter/sec. The linear guide bearing are sized to test a 20 MT payload with a CG 3 M off the table surface, with 60 MT-M over turning moment at 1 g. The entire table assembly is attached to the mass via the post tensioned steel plates on the mass top surface. The actuator is attached to the moving table via a coupling flexure which is guided by linear bearings.

This facility is being managed by Dr. Muhammad Masood Rafi, Professor and Chairman, Department of Earthquake Engineering.

ADVANCED MATERIAL TESTING FACILITY

This is yet another state of the art facility equipped with one of its kind equipment. It has a 1m thick reaction floor and 1.3m thick reaction wall which can be used for testing of structures subjected to vertical and lateral loads. The Lab has the facility to test pre stressed girders of up to 110 ft. length. The equipment includes a portal frame designed to work with the 5000 kN pseudo dynamic test system. Complete system includes 5000 kN actuator, hydraulic power supply, hydraulic service manifold, digitally supervised analog servo controls, pseudo dynamic application software, and a 300 channel data acquisition system.



This facility is being managed by Dr. Muhammad Masood Rafi, Professor & Chairman at Department of Earthquake Engineering.

RESEARCH CENTRES

ELECTRONIC DESIGN CENTRE

Electronics Design Centre performs cutting-edge fundamental and commercially driven research in electronic devices and circuits, radio frequency and microwave integrated circuits. Since its inception (January 2011), EDC's primary objectives have been to investigate scientific fundamentals necessary to obtain incessant improvements in ultimate miniaturization, increased functionality, enhanced bandwidth and improved efficiency. EDC has several international linkages in US, Europe and Asia pertaining to its expertise. The Centre has produced three PhDs so far, and continues to enhance NED University's reputation for quality research output. At present, EDC consists of a RF (Radio Frequency) Lab, DC (Device Characterization)



Lab, Design Tools and expertise including Sonnet, Cadence, Mentor Graphics, MicroTech (TCAD) and AWR Microwave.

The Centre is run by Dr. Sadia Muniza, Assistant Professor at Department of Electronic Engineering.

HIGH PERFORMANCE COMPUTING CENTRE (HPCC)

HPCC manages high performance computational resources to address the miscellaneous computational needs. With 10 TFLOPS of computational power and various scientific software along with related expertise, the Centre provides an excellent state-of-the-art R&D and business opportunities for its users. The targeted research areas of this Centre include:

- High Performance Computing (SMPs / Cluster / Grid / Cloud / Distributed systems)
- Data Analytics / Big Data / Data Mining / Machine Learning
- Computer Architecture (Serial / Parallel / Multi-core / GPGPUs / Embedded systems)
- Algorithm Design & Programmeming (Serial / Parallel / Multi-core / GPGPUs / Distributed)
- Operating Systems Design / Linux Kernel Design and debugging
- Database (RDBMS / No SQL)
- Automatic Design Space Exploration
- Multi Objective Optimization / Meta and Hyper Heuristics

The Centre is providing support to industry and organizations. It also provides in-house software inventory support to entire NED University. The Centre has students from PhD, Masters, and Bachelors working on various projects. This Centre is currently being managed by Dr. Muhammad Ali Ismail, Associate Professor at Department of Computer and Information Systems Engineering.



K ELECTRIC LAB

K-Electric has partnered with NED University to establish its Electrical Engineering lab along with the provision of integrated equipment so as to further strengthening the platform for engineering students. The Lab equipment includes modified relays, test benches, transformers and various other valuable devices used in grid stations. Moreover, separate areas for lectures and experiments have been established as well. This lab is enabling electrical engineering students to gain first-hand access to complex electrical equipment, while enhancing R&D activities in line with the utility's research driven approach.



This facility is being managed by Dr. Muhammad Ali Memon, Associate Professor & Chairman at Department of Electrical Engineering.

NED-DICE ENERGY INNOVATION CENTRE

NED-DICE is a joint collaborative initiative of NED University of Engineering and Technology and DICE Foundation. NED-DICE provides a platform for energy related innovations and for collaboration among academia, industry, government, entrepreneurs and expatriates to integrate science, technology and policy solutions to solve pressing energy challenges faced by Pakistan. NED-DICE aims to mobilize Energy Professionals of Pakistani origin around the world, to take advantage of their expertise and experiences for growth of energy sector in Pakistan.

This facility is managed by Dr. Mubashir Ali Siddiqui, Professor and Chairman, Department of Mechanical Engineering.

PRODUCT DEVELOPMENT CENTRE

With the emerging new technologies and shorter product life cycle with high quality demand, the manufacturing industry in Pakistan stands at a position where they are expecting tough challenges ahead. Higher educational institutions in Pakistan are there to share these challenges NED University has been facilitated with Product Development Centre (PDC). This centre is fully equipped with complete range of sophisticated equipment and software to be used for re-engineering.

This facility is managed by Dr. Muhammad Fahad, Associate Professor, Department of Industrial and Manufacturing Engineering.

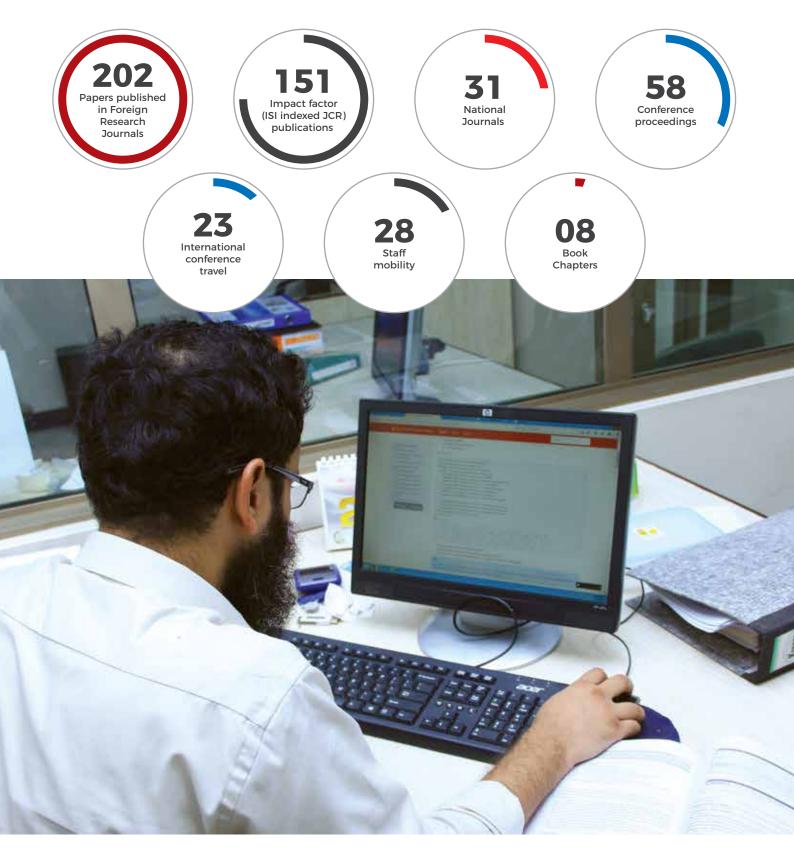
WATER MODELING CENTRE

The Water Nodeling Centre (WMC) was inaugurated on May 21, 2013. Under the supervision of Dr. Imran Ahmed, this Centre serves as a research institute with urge of providing better understanding of private and public water resources and management strategies. Research and outsourced projects are conducted by the team of WMC.

WMC is equipped with various computer based models for performing water supply analysism flood plain mapping, drainange system design, groundwater assessment, watershed simulation, climate change, computational fluid dynamics (CFD), irrigation system design, and many more related tasks.

RESEARCH PUBLICATIONS

NED University continues to disseminate discoveries and contribution to knowledge through publications and proceedings. During the reported period, the statistics remained indicative to an upward trend in producing research:



RESEARCH JOURNALS

NED University publishes the following research journals:

- NED University Journal of Research Since 2013, the journal is published biannually in two sections, namely Structural Mechanics and Applied Sciences. The primary aim of this journal is to provide an inter national forum for the dissemination of research and new developments and their applications in engi neering and technology. NED University of Journal of Research is an 'X' category HEC recognized journal, and indexed by several international indexing services.
- Journal of Research in Architecture and Planning (JRAP) Focusing on research works relevant to the fields of architecture and planning, this journal explores issues of relevance to both scholars and practitioners. JRAP was initiated in 2000 and is a peer reviewed journal published biannually since 2011.
- Journal of Social Sciences and Interdisciplinary Research (JSSIR) is a refereed, bi- annual journal. The journal acts as a forum for social scientists and researchers to investigate and discuss issues confronting societies both local and global. All the submitted manuscripts are multiple peer-reviewed.



INTERNATIONAL CONFERENCES ORGANIZED

Seven international conferences were organized during 2016-17, which were attended by several national and international key note speakers, authors and delegates. Some of these conferences are into their sixth or seventh rounds, attracting diversified contributions in subject areas:

- 2nd International Electrical Engineering Conference (IEEC 2017), May 19-20, 2017
- 1st International Conference on Urban Resilience & Adaptation, Mar 24-25, 2017
- 7th International Mechanical Engineering Congress (SIMEC-2017), Mar 24-25, 2017
- DICE-Automotive 2016, Dec 28-29, 2016
- 7th International Civil Engineering Congress, Dec 23-24, 2016
- 1st International Conference on Innovations in Computer Science & Software Engineering (ICONICS-2016), Dec 15-16, 2016
- 6th International Mechanical Engineering Congress, July 15-16, 2016



OFFICE OF RESEARCH, INNOVATION AND COMMERCIALIZATION (ORIC)

- Research Internship Programme The prime objective of this Programme is to promote research culture among university students and expose our graduates to research environment and practices. Currently, 60 plus applications have been received from students for the first batch of Research Internship Programme.
- Technology Incubation Centre Centre of Innovation Technology Incubation and Commercialization (CINETIC) is responsible to provide physical facilities and professional expertise which includes basic infrastructure, utilities, mentoring from faculty advisors and entrepreneurs; networking with high profile professionals from industries, and excess to financers along with all marketing and launching support.
 Eight start-ups were selected in the first batch of incubation. For the second batch, 11 companies have been registered.
- Workshops: A number of workshops were organized. Some salient ones are:
- Arranged lecture on Entrepreneurship by Notable NED Alumni by Mr Safwan Shah
- Organized Lecture on "Role of Technology in Improving Governance & Entrepreneurial Landscape of Pakistan" by Dr. Umar Saif
- Organized workshop on Strategic Vision "Kuch Khuwab hain Jinko" by Time Lenders
- Organized DICE Virtual Innovation Competition in collaboration with DICE Foundation, September 2016
- Organized international event TEDx in collaboration with NED Entrepreneurship Society in January 2017
- Organized one day workshop on creating awareness on Intellectual Property rights and Protection in Feb 2017
- Organized one day workshop with Plan9 "Pitch Makes Perfect" during February'16.
- Organized one day Workshop on "Market Research for startups" by Mentors from Bizfacotry in June-July 2016
- Organized "Microsoft BizSpark" Session by the Developer Experience and Evangelism Group- Microsoft Pakistan
- Workshop on "How to make your startups profitable through Facebook" for startups by Digital Eggheads in August 2016
- One day workshop for startups on "Managing your team ,Roles and Responsibilities" in August 2016 by 3i Logics-Moodle Pakistan
- Workshop on "Women Empowerment" on International Women's day by CIRCLE Women during March 2017
- Workshop on "Company Incorporation and Governing laws" for startups during March 2017 by SECP
- Workshop on "Team Building and Managing Roles and Responsibilities" by Unilever Professional for startups during March 2017
- Workshop on "Market Research and Gap Analysis" for startups by Mushawar Consultancy during March 2017

LINKAGES

A number of MoUs exist between ORIC and various organizations. The following is a list of new relationships formalized during 2016 and 2017.

Reon	Reon Engineering	Pakistan	2016
INGAZ Palament	Injaz Pakistan	Pakistan	2016
Plan Plan	PLAN 9	Pakistan	2016
Track	Moodle Pakistan (3i Logic)	Pakistan	2016
	Al-Khawarzmi Isntitute of Computer Science, UET-Lahore	Pakistan	2016
Viscous.co	Viscous.co	Pakistan	2016
	ORIC-Balochistan University of Engineering & Technology, Khuzdar	Pakistan	2016
CycleYaari	CycleYaari	Pakistan	2016
SSDII	Soft Skills Development Institute International (SSDII)	Pakistan	2016
Û	Usman Institute of Technology	Pakistan	2016
Virtual University	Virtual University of Pakistan	Pakistan	2016
6penMIC	OPENMIC	Pakistan	2016
BRITISH COUNCIL	British Council	Pakistan	2017
CINETIC	Circle to CINETIC	Pakistan	2017

QUALITY ASSURANCE

ISO 9001 certified since 2002

QEC in **'W'** category

QECs established in all affiliated institutions

QEC (previously known as Quality Management Cell) was established in 1999 with the aim to develop and implement Quality Management System at NED University. The cell successfully acquired ISO 9000 certification in year 2002. Since then, the QEC has been instrumental in assuring quality to its customers and stakeholders. With the advent of QAA in recent years, QEC NED has coordinated with HEC with the spirit of continual improvement. The following are major highlights from 2016-17:

- QEC in 'W" category Quality Assurance Agency (QAA) of the HEC assesses the progress of the Quality Enhancement Cells (QECs) of all Universities through a quantitative 'Scorecard System' based upon their performance and participation in quality-related processes. During the reporting period, the University QEC has been assigned a score of 90.65% with a placement in 'W' Category.
- Establishment of the QECs at affiliated colleges/institutions In pursuance of QAA-HEC instructions, NED University has successfully established the QECs in all affiliated colleges/ institutes of the University. In this regard, the NED-QEC has conducted necessary meetings and arranged training Programme for all nominated officials of affiliated colleges/ institutes to develop Self-Assessment Reports (SARs) in their respective colleges/ institutes.
- Transition from ISO 9001:2008 to ISO 9001: 2015 In consultation with the certifying agency Lloyds Register Quality Assurance (LRQA), the University decided to acquire the latest certification of the ISO 9001:2015 Standards for the QMS. This transition required tremendous work due to the major changes in the standards. The work is in its final stages and during the next reporting period, it will be completed.
- Capacity Building Another important activity of Quality Enhancement Cell is planning and arrangement of various training Programmes according to the requirement of departments. The department organized thirty (30) training sessions on various topics.
- Self-Assessment Reports (SARs) According to new policy of Higher Education Commission (HEC), all Masters and Bachelor Programmes have to go through the process of development and assessment of SARs except those which have valid accreditation council certificates. The Self-Assessment Reports (SAR) of 29 Bachelors, 57 Masters and PhD Programmes have been prepared and assessed during this report ing period.
- Yearly Objective 2017 The yearly objective 2017 for all teaching departments is: "Accreditation of Under graduate Programmes - BE Programmes under Outcome Based Education (OBE) System with Pakistan Engi neering Council (PEC) and BS/ BArch Programmes with respective Accreditation Councils recog nized or established by the HEC". This would provide following benefits:
 - i. Alignment of NED UET Engineering and relevant studies with the International accreditation bodies such as Washington Accord.
 - ii. International recognition of NED UET students and alumni.
 - iii. Outcome based education system taking consultation of all stakeholders such as; industry, alumni, parents etc.
 - iv. Focused outcome for the improvement of social values and productive society.
- External and Internal Audits/ Assessments Audit being the major activity regarding implementation of ISO standards, the QEC arranged two Surveillance Audits and two Internal Quality Audits during the reporting
- Participation in the HEC/QEC meetings and workshops Prof. Dr. Asif Ahmed Shaikh, Director QEC, participated in the following Progress Review Meetings of Quality Enhancement Cells (QECs) organised by the Quality Assurance Agency (QAA) of the HEC.
 - i. 9th Meeting: Dated: 01st and 2nd December 2016 in HEC, Islamabad
 - ii. 10th Meeting Dated: 11th and 12th May 2017 in HEC, Islamabad









ACCESS & OPPORTUNITIES

SCHOLARSHIPS

NED University recognizes the need to support students demonstrating merit or face challenges courageously in a variety of contexts. Department of Student Affairs is responsible to solicit scholarships applications and processes them round the year. The salient statistics pertaining to scholarships are:

826 Scholarships Awarded	F	word RS.	th 27 _{Mi}	llion	5 Priva Done	ate	
Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Number of Students	1088	1120	639	697	781	727	826

STUDENT MOBILITY

15.2

18.4

24.4

24.2

27.4

13.4

11.6

International travel provides students with opportunities to experience different countries and its cultural and historical environments. They are intended to increase their understanding of other cultures, as well as improving their language skills and broadening their social horizons. NED University also encourages its students to win exchange placements and provide opportunities by sending their nominations as well. During the reported period, a total of **15 students** went to various universities and organizations on exchange Programmes. Six of these students were female.

In addition to exchange Programmes, **107 students** participated in various international competitions abroad including Formula One, Shall Marathon, Baja SAE events etc.



Amount (PKR Millions)

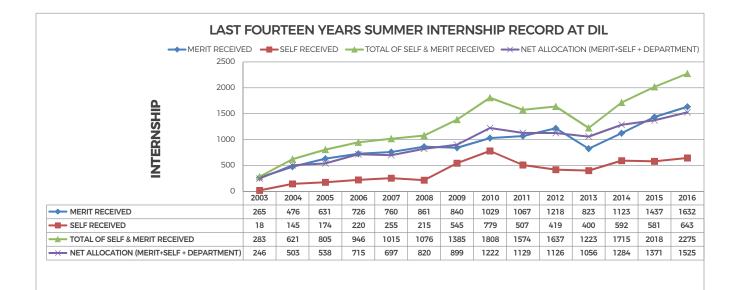
DIRECTORATE OF INDUSTRIAL LIAISON

The Directorate of Industrial Liaison performs several functions mostly related to the interaction with industries and finding opportunities for students becoming involved in practical training before graduation. Key areas are categorized as follows:

- 1. Arranging internships in different industries during both winter and summer vacations.
- 2. Organizing study tours of industries and visits for students to get ideas for their final year projects.
- 3. Securing orders for projects and/or suggestions for new Research from industries for students and Research Scholars.
- 4. Help NED graduates in obtaining suitable employment depending on requirements of the job market; also at the same time helping prospective employers contact graduates by arranging tests / interviews.

The Directorate of Industrial Liaison performed following core jobs during the reporting period:

- 1. 2275 Summer Internships in 615 organizations.
- 2. Arranged 145 study tours in 80 industries.
- 3. 122 projects for final year students were formally coordinated through industries.
- 4. 281 employment facilitation activities were conducted jointly with various employers.
- 5. 41 "On Campus Hiring" activities were conducted.



CENTRE FOR CONTINUING ENGINEERING EDUCATION

NED University established Centre for Continuing Engineering Education (CCEE) in 1998 for the continued professional development of graduates. The CCEE designs, devises and conducts short duration courses in Engineering, Information Technology, Management as well as Postgraduate Certificate Courses (PGC). Further, CCEE is registered with Pakistan Engineering Council as Professional Engineering Body (PEB) and courses conducted by CCEE are valid for earning CPD points.

Emphasis was laid on designing quality based professional courses / workshops on feedback from the industry and professionals. This strategy has resulted in making CCEE programProgrammes more successful in terms of meeting professionals' requirements. Some featured professional courses conducted during the reported period are:

- i. Software Engineering,
- ii. Enhancing Logistics Function Performance,
- iii. Lean Six Sigma Tools for Excellence,
- iv. Strategic Management,
- v. Industrial Wastewater Treatment,
- vi. Accounting & Finance for Non-Financial Executives,
- vii. Lifting Equipment Inspection,
- viii. Managing the Maintenance Department,
- ix. Inventory Management & MRP,
- x. Occupational Health & Safety,
- xi. Industrial Control Systems with Extensive Simulation Package,
- xii. Web Engineering,
- xiii. Corrosion & Corrosion Control in Industrial Practices,
- xiv. Hazard Operability (HAZOP) Study,
- xv. ProgramProgrammemable Logic Controllers,
- xvi. Productivity Improvement via Lean Manufacturing

• Professionals from 84 organization attended courses during the reported period.

• Net income from the CCEE activities during 2016-17 is Rs. 13.452 Million.

CO-CURRICULAR ACTIVITIES, SEMINARS AND WORKSHOPS

NED University pays significant attention to providing its students ample opportunities for activities beyond academic endeavors through various activities. The list below is a snapshot of some activities conducted over the reporting period.

- 1. Lecture on 'Research Process: Methods and modalities' May 2017
- 2. A seminar on 'Introduction to Financial Technology (FINTECH)' May 2017
- 3. Seminar on Human Right Education & Sensitization, by Ministry of Human Rights, Government of Pakistan, 18th May 2017
- 4. NED University Annual Bilingual Declamation Contest 2017, by Debating Society, 17th May 2017
- 5. Japan Essay Writing Competition at NED: "Learning from Nature", by Goi Peace Foundation Japan, 13th April to 15th June 2017
- 6. Seminar on 'Professional Ethics for undergraduate students', 9th March 2017
- 7. One-Day Seminar on Training and Development of Young Engineer Professionals in Service Industry, 30th March 2017
- 8. Extended lecture on "Production Optimization" in collaboration with PPL, 16th March 2017
- 9. A seminar on 'Process Safety' was arranged in collaboration with Abu Dhabi Oil Refinery, 28th March 2017
- 10. Introduction of FE Application on various Automotive Crash Modes, by Mr. Syed Imam, working in USA with different OEMs for last 23 years, 1st March 2017
- 11. Big Data Business & Innovation Opportunities, Adoption Challenges, Use Cases, by Mr. Zeeshan Jalali, Stevens Institute of Technology, New Jersey, USA, 20th March 2017
- 12. Seminar on Professional Ethics, 9th March 2017
- 13. Seminar on "Internship Drive A Gateway to Industry" on 13th March 2017
- 14. 'Strategy and Roadmap for Energy Efficient Buildings and Smart Cities in Pakistan', in collaboration with the Ministry of Federal Education and Training, Government of Pakistan, under Presidents Program for Care of Highly Qualified Overseas Pakistanis (PPQP), 8th March 2017
- 15. Workshop on 'Web and Mobile Application Development with MEAN Stack', by Mr. Suhaib Nehal, 11th January to 29th March 2017
- 16. Blood Donation Camp at NED, Fatimid Foundation, 7-8 March 2017
- 17. Tree plantation drive at NED, K-Electric and Green Society, 15-17 March 2017
- 18. Spring Festival 2017, Department of Student Affairs, 27th March 2017
- 19. Workshop on 'Graphic Designing with Photoshop & Illustrator', by Anusha Syed, 20-24th January 2017
- 20. Workshop on 'Azure' by Microsoft, 6th March 2017
- 21. Workshop on 'Agile Project Management with SCRUM', by Mr. Imtiaz Ahmed, 18th March to 15th April 2017
- 22. SENTEC (Mint to Win It), SENTEC, 2nd March 2017
- 23. Six Days Hands-on Work Shop on "Cloud Computing using Amazon Web Service (AWS)" at HPCC, every Saturday from 21st January to 25th February 2017
- 24. One day workshop on creating awareness on Intellectual Property rights and Protection, in collaboration with Intellectual Property Office of Pakistan, 28th February 2017
- 25. 3-Day Hands-on Training Workshop on 'nD Building Information Modeling' for Global Partnership for Education, Balochistan Education Project (GPE-BEP), 21-23 February 2017
- 26. Meet Pakistan Engineering Council Chairman, Department of Students' Affairs, 23 February 2017
- 27. Workshop on "How to achieve above and beyond your actual ability by using Pomodoro Technique & Mind Mapping", 5th January 2017

- 28. Seminar on "FYP Management" in collaboration with Careem, 13th January 2017
- 29. Seminar on "Goal Setting for Success" in collaboration with Sabre Travel Network Pakistan, 27th January 2017
- 30. A technical discussion with Chinese experts and way forward for collaborations, held on 5th January 2017
- 31. Seminar on "Islamic Banking in Finance" in collaboration with Quants Society, 10th January 2017
- 32. Seminar on 'Getting to Know Computational Finance', 13th January 2017
- Seminar on "Road Map for Hazardous Material & Dangerous Goods Safety Management during Transportation in Pakistan (Vision-2050)" jointly organized by THE NEEM (an NGO) and the Department of Environmental Engineering, 19th December 2016.
- A Seminar on 'Multi Body Simulations using ADAMS for Development of Suspension Systems', 15th and 19 th December 2016
- 35. One-day workshop on 'Multipurpose Vehicle (MPV)', 27th December 2016
- 36. Seminar on "The Undiscovered Engineering Dimensions of Geo synthetics", 1st November 2016
- 37. Design Failure Mode & Effect Anaylsis', Mr. Mahfooz Mian, USA, 8th November 2016
- 38. Seminar on 'Water and Climate Variability of Pakistan' on 19th November 2016.
- Career Counseling Seminar Humanities- Ideas and inspiration for diverse careers and enhanced success, 31st October 2016
- 40. Seminar on "Is Islam a Logical Religion?", 24th October 2016
- 41. CASHE 2016 CIS Annual Computing and Hardware projects Exhibition, 19th October 2016
- 42. Special Lecture on Gas Field Development From Discovery to Dollars, in collaboration with Conoco Phillips Canada, 27th October 2016
- 43. Extended Lecture on "SPE Reserves Classification" in collaboration with POL
- Lecture on "Innovation and Technology in Construction Engineering and Planning", held on 7th October 2016.
- Half day Consultative Session with PAKSTRAN, 3rd October 2016
- Seminar on "Existing Locally, Thinking Globally: Building Better Professional Engineers by Promoting Religious, Ethical and Social Harmony", 18th October 2016
- 47. Career Counseling Seminar: Surviving Workplace Challenges, Ms. Hija Kamran, Digital Rights Foundation and Ms Zermeena Khan, Unliver Pakistan, 31st October 2016
- 'Design of Experiments', by Mr. Muhammad Ishtiaq, PhD, Lawrence Tech University, Michigan USA , 2nd September 2016
- 49. ITEC 2016, 9th National Grand IT Event, 7th September 2016
- 50. A seminar on 'Technicalities of Distillation column' in collaboration with Enar Petroleum Refinery, 23rd September 2016
- 51. 'Awareness Session on Pakistan Halaal Standards', Mufti Naeem Shahid, (CEO of Halaal Foundation & Chairman Halaal Technical Committee PSQCA), 26th September 2016
- 52. A seminar on 'Environmental Health & safety', in collaboration with Tri Pack Private Limited, 22nd August 2016.
- 53. All Pakistan Mega Project Exhibitions, Robotics & Competitions, SENTEC, 8-10 August 2016
- 54. 'Product Life Cycle Management', by Mr. Abid Sandila, MS, Wayne State University, USA, 27th July 2016

EXTRA-CURRICULAR ACTIVITIES AND SPORTS

NED University is proud to have a vibrant and dynamic student body, who actively engages in sports and extracurricular activities as well. These activities form the basis for providing the necessary team building and leadership skills among several others to our graduates and help them become successful professionals. Here is a snapshot of this year's activities and achievements.

- 1. Tree Plantation drive at NED, by Green Society, 7th June 2017
- 2. Qirat,Naat & Seerat-un-Nabi Competition, by Students' Affairs Department, 15th June 2017
- 3. Urdu Mushaira at NED, by LPS and MOSAIC, 20th June 2017
- 4. Blood Donation Camp at NED, Fatimid Foundation, 7-8 March 2017
- 5. Tree plantation drive at NED, K-Electric and Green Society, 15-17 March 2017
- 6. Spring Festival 2017, Department of Student Affairs, 27th March 2017
- 7. MOSAIC Arts Fiesta, MOSAIC, 21-22 February 2017
- 8. MUN & Parliamentary Debate Training Session, NED Debating Society, 22nd February 2017
- 9. NPS-Media Arts Photography Summit Workshop, NED Photography Society, 23rd February 2017
- 10. NPS Orientation'17 at NED, NED Photography Society, 1st February 2017
- 11. Prime Minister Green Pakistan Programme at NED, Department of Students' Affairs, 9th February 2017
- 12. Clean & Green NED Campaign '17 at NED, Green Society, 3rd January 2017
- 13. NPS MAPS workshop Induction Ceremony, NED Photography Society, 3rd January 2017
- 14. Blood Donation Camp at NED, Indus Hospital, 3-4 January 2017
- 15. SENTEC Orientation, 6th January 2017
- 16. 19th All Pakistan Inter University Declamation Contest for Award of Allama Iqbal Shield Round one, NED Debating Society, 27th January 2017
- 17. Anti-Corruption Week at NED, Character Building Society under HEC & National Accountability 05-11 December 2016
- 18. Orientation 2016-17, Department of Students' Affairs, 8th December 2016
- 19. Peace Walk on APS Peshawar Incident (2nd Anniversary), Department of Students' Affairs, 16th December 2016
- 20. Workshop ARTSTA, NED Photography Society, 6th & 13th October 2016
- 21. Blood Donation Camp at NED, Indus Hospital, 19th October 2016
- 22. Breast Cancer Youth Awareness Drive'16 at NED, HEC and Pink Ribbon, 26th October 2016
- 23. Workshop on Film Making, NED Photography Society, 27th October 2016
- 24. C- Suit, Green Society & Youth Parliament, 28th October 2016
- 25. Awareness Camp at NED on Thalassemia Disease, Kashif Thalassemia Centre, 28th September 2016
- 26. Pakistan Quiz 2016, Pakistan Society, 12th August 2016
- 27. Theatre Play "Pakistan May Hum Hain", MOSAIC, 16th August 2016
- 28. Orientation & Seminar on Green Energy 2016, Green Society, 17th August 2016
- 29. Short Film of Patras Bukhari, NED Photography Society, 18th August 2016
- 30. Seminar at NED University, Power of Positive Thinking, Zaynab Academy, 24th August 2016
- 31. Workshop on Google for Publisher, Google, 31st August 2016



Sports events won by NED University

- Winner: Inter University Competition 2016-17, Cricket (Boys) Zone-G, 23rd to 25th January 2017, at Iqra University, Karachi.
- Winner: Inter University Competition 2016-17, Badminton (Boys) Zone-G, 8th to 10th March 2017, at Dawood University of Engineering & Technology Karachi.
- Winner: IBA SPORTS GALA 2017 Basketball (Girls), 5th to 8th January 2017
- 2nd Position: Jashane-e-Azadi Cricket Championship at Sir Syed University, 17th to 27th August 2016
- 2nd Position: Sindh Open Swimming (Boys) Championship 2016, 13th to 15th October 2016 at KPI Swimming Complex, Karachi. Events :1.50 meter Free Style, 2.50 meter Butter Fly, 3.50 meter Breast Stroke.
- Winner: 2nd Inter University Sports Gala, Pakistan Marine Academy Cricket, 16th February 2017 2nd Position: 2nd Inter University Sports Gala, Pakistan Marine Academy - Table Tennis, 16th February 2017
- 2nd Position: 2nd Inter University Sports Gala, Pakistan Marine Academy Badminton,16th February 2017 .
- 2nd Position: 2nd Inter University Sports Gala, Pakistan Marine Academy Football, 16th February 2017
- 2nd Position: 2nd Inter University Sports Gala, Pakistan Marine Academy Lawn Tennis,16th February 2017 ΞĒ.

NED University participation

- PIMSAT Cricket Championship 2016-17, 4th to 6th January 2017
- Red ball campus Cricket Championship 2016, 14th to 22nd July 2016
- Inter University Competition 2016-17, Table Tennis (Boys) Zone-G, 09th to 12th January 2017at Dow University Health Sciences (DUHS)
- Inter University Competition 2016-17, Football (Boys) Zone-G, 10th to 12th January 2017 at Sir Syed University, Karachi
- Inter University Competition 2016-17, Boxing (Boys) Zone-G, 24th to 26th February 2017 at Benzair Bhutto Shaheed University Liari. (BBSUL)
- Inter University Competition 2016-17, Basketball (Boys) Zone-G, 4th to 6th March 2017 at Institute of **Business Administration (IBA)**
- All Pakistan Intervarsity Cricket (Boys) Final Round,
- 26th to 28th January 2017, at Institute of Business Administration (IBA)
- All Pakistan Intervarsity Badminton (Boys) Final Round, 14th to 16th March 2017 at Hamdard University
- 2nd Inter University Sports Gala, Pakistan Marine Academy Athletics, 16th February 2017 2nd Inter University Sports Gala, Pakistan Marine Academy Volley ball, 16th February 2017
- 2nd Inter University Sports Gala, Pakistan Marine Academy Basketball, 16th February 2017
- IBA Sports Gala 2017 Throw ball (Cirls), 5th to 8th January 2017

SPORTS EVENTS ORGANIZED BY NED UNIVERSITY ON ITS SPORTS FACILITIES

Jashan-e-Azadi Championship 2016

Volleyball (Boys), 17th August 2016	Table Tennis, 18th August 2016
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All Karachi Sports Fiesta 2016

Cricket (Boys), 05 to 08 September 2016	Table Tennis (Boys), 05 to 08 September 2016				
Table Tennis (Girls), 05 to 08 September 2016	Squash (Boys), 05 to 08 September 2016				
Futsal (Boys), 05 to 08 September 2016	Basketball (Boys), 05 to 08 September 2016				
Volley ball (Boys), 05 to 08 September 2016 Volley ball (Cirls), 05 to 08 September 2016					
Throw ball (Girls), 05 to 08 September 2016					

All Karachi Cricket Championship 2016, 28th October to 14th November 2016

Sports events organized at NED University in collaboration with partner organizations

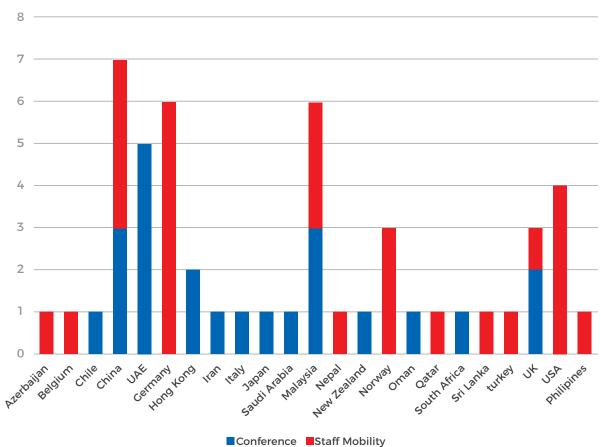
- Pakistan's Nation Taekwondo Championship 2016, Pakistan' Nation Taekwondo Federation, Karachi. 1st October 2016
- Inter Collegiate Cricket Tournament 2016-17, University of Karachi. 24th to 28th October 2016
- Trial for Selection HEC Badminton (Men & Women) team 2016-17, HEC. 9th February 2017
- Trial for selection for Inter Board Sports Gala 2016-17, Sindh Board of Technical Education (SBTE), Karachi. 11th & 13th Feb 2017
- Pakistan Inter Board Cricket Championship 2016-17, Board of Intermediate Education, Karachi. 31st Jan, 1st Feb & 4th February 2017
- Inter varsity Badminton (Boys) Zone-G 2016-17, Dawood Engineering University & Technology Karachi. 8th to 10th March 2017

Outreach and Networking

STAFF MOBILITY AND CONFERENCE TRAVELS

Universities thrive on the knowledge and expertise of their faculty. International mobility provides an excellent opportunity for academic and professional development to the faculty members. These exchange opportunities also provide new linkages and help institutions to broaden and enrich the range and content of offering Programmes.

During the reporting period, **51 faculty members** proceeded abroad under staff mobility and international conference travels. These visits spanned **twenty three (23) countries**.



International Conference Travel and Staff Mobility

PROMINENT NATIONAL & INTERNATIONAL DELEGATES

NED University was privileged to have hosted several prominent national and international luminaries on its campuses during the year. The list is very long; hence just some are being shared here.

"Laptop is an integral part of the research-based modern education and is very important in the present day age of IT", said Governor of Sindh, Muhammad Zubair, at NED University on 29th May 2017. He was speaking at a ceremony for the distribution of laptops at the NED University.

> Prof. Ahsan Igbal, Federal Minister for Planning, Development Reform / Deputy Chairman Planning Commission, Government of Pakistan visited NED University on 27 July 2016. During the visit, he inaugurated Advanced Materials Testing Laboratory in Department of Earthquake Engineering

His Excellency Frederic Verheyden, Ambassador of Belgium in Pakistan, here seen in discussion with Prof. Masood Rafi, Chairman. Department of Earthquake Engineering during his visit to state of the art laboratories at NED University.

> His Excellency Tore Nedrebø, Ambassador Of Norway In Pakistan expressing his views during his visit to NED University for the Ground breaking ceremony for the Norwegian Centre of Excellence in Petroleum Studies. The event was held on 31st January 2017, and was also attended by dignitaries from Planning Commission of Pakistan, Pakistan's Petroleum Industry, academia, faculty members of NED University and selective media personnel.

Dr Zhu Qian, from University of Waterloo, delivering keynote address to the conference delegates on 24th March 2017.











RESEARCH EXCELLENCE AWARD

On 20th December 2016, 'Research Excellence Award was awarded to Prof. Sarosh H. Lodi in recognition of his Life-Long Research and Scholarly Excellence at NED University spanning over 30 years. This was the second time in the history of NED University when this award has been conferred. The first award was awarded to Prof. Dr. S. F. A. Rafeeqi, The award criteria includes holding of Doctorate Degree, Full time Faculty Member having at least 20 years of regular service at NED University, and significant contributions in several academics and research domains



The Honorable Chief Minister Sindh, Syed Murad Ali Shah awarded Prof. Sarosh H. Lodi with the research excellence award.

BEST TEACHER AWARD

Each year HEC awards outstanding university teachers to encourage and recognize their contribution. This recognition is envisioned to enhance the quality of research through national recognition of the contributions made by them. Each year nominations for the awards are invited from the Universities and Degree awarding institutions of Pakistan. The evaluation categories include; academic qualification, teaching performance, research projects, research publications, research supervision, professional recognition, professional development and community service. Dr. Farrukh Arif was conferred with Best University Teacher Award by Mr. Muhamad Baligh Ur Rehman, Minister of State for Federal Education and Professional Training, at Higher Education Commission, Islamabad on December 27, 2016.



Dr. Farrukh Arif receiving Best Teacher Award from Mr. Muhamad Baligh Ur Rehman, Minister of State for Federal Education and Professional Training, at Higher Education Commission, Islamabad on December 27, 2016

DISTINGUISHED ALUMNUS AWARD

Chief Minister Sindh, Syed Murad Ali Shah on 20th December 2016 received Distinguished Alumnus Award in an impressive ceremony held at NED University. He has been instrumental in providing exemplary support and uplifting to his alma mater. Sharing his views, Syed Murad Ali Shah recalled and cherished the golden days of his studentship, hostel life, canteen, class rooms, friends and teachers at the NED University.



RESEARCH PRODUCTIVITY AWARD

Research Productivity Award (RPA) is given on the behalf of Pakistan Council for Science and Technology, Ministry of Science and Technology to the active scientists on the basis of their cumulative impact factor, total citations, patents granted and commercialized, PhD supervised, books published / edited, getting external research grants, introducing any crop varieties/ engineering process / products / medical devices etc.



In December 2016, Dr. Muhammad Ali Ismail, Associate Professor at Department of Computer and Informa tion Systems Engineering was awarded Research Productivity award for the year 2015. Prof. Dr. Anwar ul Hassan Gilani, Chairman PCST presented the Award to Dr. Muhammad Ali.

Building Codes of Pakistan - Fire Safety Provisions

President Mamnoon Hussain formally launched Building Codes of Pakistan-Fire Safety Provisions at Aiwan-e-Sadr, Islamabad on 27th February 2017. Prof. Dr. Sarosh H. Lodi and Prof. Dr. Muhammad Masood Rafi were two faculty members from NED University who were awarded letters of appreciation by the Presi dent of Pakistan for their contribution in developing the codes.



President Mamnoon Hussain in a group photo with task force members of PEC during the launching ceremont of Fire Safety Provisions - 2016 of Building Code of Pakistan at the Aiwan-e-Sadar. Federal Minister for Science & Technology Rana Tanveer Hussain and Chairman, NDMA, Maj. Gen. Asghar Nawaz are also present. APP

Book published - Urban Traditions and Historic Environments in Sindh

NED University continues to disseminate discoveries and contribution to knowledge through publications and proceedings. During the reported period, the statistics remained indicative to an upward trend in producing research:



About the Book: Shikarpoor Historic City, in Sindh, Pakistan, has a rich historical heritage: as a central point on caravan trade routes, it served as the gateway to Afghanistan and Central Asia. In recognition of that history, in 1998 the government of Sindh named it a protected heritage site—but that status hasn't prevented the ongoing destruction of the city's historic fabric. This book tells the story of Shikarpoor and presents as complete a picture of its threatened historical fabric as possible, through copious maps and images past and present.

Anila Naeem is professor in and co-chair of the Department of Architecture and Planning, NED University of Engineering and Technology in Karachi, Pakistan.

INSTITUTIONAL LINKAGES

Collaborations with industries, universities and other organizations are undoubtedly important in carrying out meaningful research and other academic activities. NED University linkages continued to grow during the past year. Here is a showcase of some of the recent MoUs.

British Council University if Strathclyde, UK Norwegian University of Science and Technology Institute of Nano Electronic Engineering, Universiti Malaysia Perlis Minjiang University, China Confucius Centre, University of Karachi Tianjin University, China AGH University of Science and Technology, Poland University of Boltion, UK Library of Congress, USA **Italian Development Committee** The United States Educational Foundation in Pakistan (USEFP) City District Government Karachi (CDGK) Pakistan Marine Academy Karachi Water and Sewerage Board (KWSB) ABB Pakistan **Siemens Pakistan** International Organization of Migration (IOM) United Insurance Pakistan Beverage Ltd Pak Oasis Engro Chemical Pakistan Ltd National Institute of Lasers and Optics **OPEN** Karachi SSGC **K** Electric Pakistan Petroleum Ltd **Ihsan Trust** Pakistan Standards & Quality Control Authority (PSQCA) Pakistan Association of Automotive Parts & Accessories Manufacturers (PAAPAM)



ALUMNI ENGAGEMENT & INSTITUTIONAL SUPPORT

- Business Information Modeling Lab is a state of the art Centre, which provides free service to industrialists for resolving pre-construction issues of high rise and complex structured buildings related to wind zones, emergency exits and temperature through developing visual models of the projects. This is a first Centre of its kind in Pakistan established in collaboration with NED Alumni Association of Tri-State (NEDATS) with the total cost of Rs 3.5 million.
- NED University Alumni Association Southern California (NEDAASC) has been extending:
- Financial support worth Rs. 1.0 million every year for the Final Year Projects
- 'Best Paper Award' worth Rs. 50,000/- to the faculty
- 'Best Teacher Award' worth Rs. 50,000/- each; one to each Professor, Associate Professor, Assistant Professor and Lecturer
- Scholarship to undergraduate students worth several million PKR every year.
- NED Alumni Network (NEDAN) has been providing financial assistance to PhD scholars.
- Alumni are also arranging webinars from Silicon Valley on regular basis for the faculty and students.
- Infrastructure support in terms of donations has also been received for renovations and development:
- Renovation of class rooms in Department of Mechanical Engineering
- Conversion of Civil Engineering classrooms on Solar Energy
- Extension of University Masjid
- Construction of Class rooms block
- Construction of Business Incubation block
- Renovation of Water storage facility

UNIVERSITY FINANCES

DEVELOPMENT PROJECTS

Summary of on-going Development Projects

		,				
No.	Name of Project	PC-1 Provision	Releases upto 20-06-2017	Amount utilized upto 20-06-2017	Expected date of Completion	
1	Strengthening of NED University of Engineering and Technology (M-III)	2193	2193	2042.599	9/1/2017 (except HRD component)	
2	Commencement of New Engineering Programs and Infrastructure Developmen at NED University	t 750.697	625	353.149	Mar-19	

FINAL DEMAND ESTIMATES FOR THE YEAR 2016-17

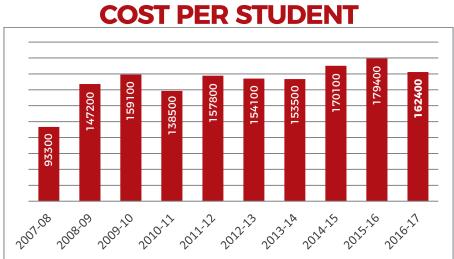
S. No	Descriptions	Recurring	Self Finance	UDWP	Research	CCEE	S. No	Descriptions	Recurring	Self Finance	UDWP	Research	CCEE
	Receipts					Payments							
1	Opening Balance	1.237	-	266.513	151.956	1.853	9	Pay & Allowances	1,355.058	-	-	-	-
2	Annual Grant from HEC	1,053.757	-	-	-	-	10	Pension Contribution	265.723	-	-	-	-
2	Sindh Government Grant	100.000	-	-		-	11	Other Charges	429,100	_	_		-
3	Fees & Other Sources	993.069	-	-		-		Other Charges	429.100	-	-	-	-
							10	Research Fund	1	FF 507			
	Fees Received from New	-	409.600	- 2	-		12		-	55.587	-	-	-
	Admissions of Self Finance					-	13	UDWP	-	55.587	-	-	-
	Scheme						14	Recurring	-	102.400	-	-	-
	Scheme						15	Endowment Fund	-	213.575	-	-	-
			^)	, , , , , , , , , , , , , , , , , , , ,			,	
	Share received from Self Finance Scheme (UDWP)	-	-	55.587	-	-	16	Development Works 2017-2018	-	-	113.318	-	-
							17	Ph.D Projects		-	-	26.593	
1	Share Received from Self Finance Scheme (Research)	-			55.587	-		Tuition Fees to Ph.D	_		_		_
6			-				18	Students	-	-	-	5.842	-
							19	Infrastructure for				2.000	
					19	Desearch	-	-	-	2.000	-		
	Income from Course Fees						20	Contigencies	-	-	-	-	7.541
7			-	-	19.988	21	Expected Transfer to Recurring Account	-	-	-	-	11.500	
											1		
8	Expected profit on Investment	-	17.549	6.350	3.175	-	22	Closing Balance	-	-	215.132	176.283	2.800
L								1					
	TOTAL RECEIPTS	2,148.063	427.149	328.450	210.718	21.841		TOTAL PAYMENTS	2,049.881	427.149	328.450	210.718	21.841

KEY INDICATORS

Key Ratios	2015-16	2016-17	2017-18 (Planned)
a. Faculty : Staff Ratio	1 : 4.2	1 : 3.9	1 : 3.2
b. Faculty : Student Ratio	1 : 22	1 : 21	1 : 18
c. Self-Generated Income as % of total Resources	41%	48%	44%
d. Self-Generated Income as % of total Expenditures	41%	45%	41%
e. Recurring Grant as %age of total Expenditures	54%	49%	53%
f. Students Fees as % of Cost per student	32%	31%	28%
g. Salary as % of Total Expenditure	62%	60%	62%
h. Non-Salary as % of Total Expenditure	38%	40%	38%

NED UNIVERSITY FUNDS

No.	Name of Fund	Total in millions PKR
1	NED University Endowment Fund	627.375
2	MoST Endowment Fund	264.775
3	Oman IT Chair Fund	174.205
4	Rafeeqi Endowment Fund	5.918
5	Pension Fund	753.987
6	G.P.Fund	362.217
7	Benevolent Fund	55.715
8	Research Fund	208.182
9	UDWP	317.795
	Total	2770.169





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