



ANNUAL REPORT **2018 - 19** 

**NED University** Of Engineering & Technology Karachi, Pakistan





Be a leader in enabling Pakistan's social and economic transformation.

# **MISSION**

Acquire education and research excellence in engineering and allied disciplines to produce leadership and enabling application of knowledge and skills for the benefit of the society with integrity and wisdom.



# **QUALITY POLICY**

NED University of Engineering and Technology believes in establishing environment conducive to continual improvement in its efforts for providing the highest level quality education.

The University is making all out efforts to raise its standards through teaching excellence and quality research. These efforts are carried out with involvement of the entire university work force – to obtain utmost possible satisfaction of its customers.

Our endeavors are to make our students useful to society in particular and to humanity in general. In dealings with industry and utilities, attempts are made to maintain standards of integrity as well as quality.



# MESSAGE FROM THE VICE CHANCELLOR

## DR. SAROSH HASHMAT LODI

As another year goes by, we continue to pursue - with determination and humbleness - the vision to enable Pakistan's social and economic transformation. I am confident that the next pages of the report will showcase as such. But before that I would like to share a few salient highlights of this University's working during 2018-19.

The University core functions remain student-centric and include teaching, research outreach and creating enabling environment for these endeavours to prosper and magnify in impact. We remain conscious of national and global challenges, and with support of our employees and students, continue to progress in all niche areas of development. This is reflected most highly by none other than the recent Times Higher Education World Impact Rankings, where NED University secured 101-200 world ranking, leading the pack in Pakistan at number one spot. What is more pleasing that the University featured in top 300 universities in the world in all eleven SDGs which were measured by the reputed ranking agency, including gender equality, quality education and responsible consumption and production. We also featured well in QS Asian Rankings 2019 as well as in UI Green Metrics Ranking for Urban regions.

The University is offering 89 programmes at undergraduate, masters and PhD levels. The present undergraduate enrolment stands at 9,397 while the total number of masters students is 2,326 and doctoral scholars are 184. During the year 2018-19, 2,053 students graduated with undergraduate degrees, 830 with masters degrees whereas four scholars were awarded PhD degrees. The total number of PhD qualified faculty has risen to 190. We stand committed to support doctoral studies for our young faculty members through the available schemes. 16 faculty members joined back after completing their doctoral studies while 52 are still studying in various universities abroad and shall return after the completion of their respective degree requirements.

We continue to remain engaged in high quality research. Rising from 95 active research projects last year, we now have 124 ongoing research projects worth Rs. 762 million. Faculty members of NED University remain actively engaged in outreach and networking to create new opportunities. This year, more then 150 faculty members proceeded abroad on staff mobility and conference travels. 338 research papers were published in foreign research journals, out of which 198 were JCR indexed. NED University continues to publish three high quality research journals, including NED University Research Journal which is HEC recognized in 'X' category. The University organized eleven international conferences where, in addition to our national delegates, several prominent international speakers also participated. NED University now hosts 20 research centres including the National Centre for Artificial Intelligence, National Centre for Robotics and Automations, National Centre for Data Analytics and Cloud Computing, and National Centre for Cyber Security. NED Virtual Reality Centre was also inaugurated this year.

Providing fair access and opportunities to student body remains one of our top priorities. This year, 1,680 students were awarded scholarships for studying in various programmes with a total scholarship amount of Rs. 113.7 Million. 2,672 industrial placement opportunities were created this year, while 54 industrial visits were arranged. The quality management, control and assurance continued to play its vital role. During the reporting period, the QEC has been assigned a score of 95.33% with a place in 'W' Category by the Quality Assurance Agency (QAA) of the HEC. NED university hosts National Incubation Centre Karachi. The initiative has so far incubated 29 startups and is offering a highly vibrant environment of mentorship and excellence.

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. NED Alumni Association of Southern California funded final year projects, research and awards including best papers and best teachers. Alumni of Urban Engineering, Computer Engineering and Industrial and Manufacturing Engineering also supported through various departmental initiatives. Industrial collaborations continue to grow, as is showcased by establishment of a fully equipped Computer lab in the Department of Textile Engineering by Soorty Textiles.

The university initiated Chinese language programme last year. The programme has seen 2,207 and 1,707 students having passed HSK-I and HSK-II level courses so far. In April 2019, Asian Civil Engineering Coordination Council (ACECC), Japan awarded the ACECC Award for the design and construction of earthquake-resistant houses in Balochistan jointly to NED University and Government of Balochistan. Similarly, Community Service - another initiative from the last year - has seen 2,880 students having completed 20-40 hours of activity so far. Inauguration of Blockchain based degree registration and verification system at NED University is a technologically high point for us, which facilitates remote degree verification in an authentic and secure manner. In January 2019, NED University hosted its 1st meeting of the International Advisory Board. Similarly, our students continued the tradition of holding NED University aloft in extra-curricular activities too. A group of Electronic Engineering students won Exon 2.0 competition among 600 participants for developing a 'vision stick' for visually impaired. Students of Architecture Department won 1st prize in the institute of Architects Pakistan Photography competition. NED University SPE Student Chapter won Student Chapter Excellence Award for 2019 wich is second highest honor a student chapter may receive. In addition to these, there is a long list of high-points, which we are proud achieve through support and activism of our students and faculty, and are included in the report.

We now move into 2019-20 with pledge to continue the hard work to lead the nation in technology and engineering, and to continue spreading Pakistan's footprint in international horizons for all the good reasons. Any of this could not have been achieved without the selfless dedication and hard work of entire workforce of NED University and its brilliant students. We are thankful to ALLAH TAALA for what we have achieved and we pray for His continued guidance and support in our endeavours. Ameen.

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# UNIVERSITY RANKING

**Times Higher Education World Impact Ranking 2019** 

Pakistan: No. 1 World Rank: 101-200





World Rank in SDG 3:

Good Health and Well being: 301+



World Rank in SDG 4: **Quality Education: 80** 



JNIVERSITY SDG 4 QUALITY EDUCATION **TOP 80** 

World Rank in SDG 8: **Decent Work and Economic** 

**Growth: 101-200** 



SDG 8 DECENT WORK AND ECONOMIC GROWTH **TOP 200** 

World Rank in SDG 10:

Reducing Inequalities: 201+



RANKINGS SDG 10 REDUCED INEQUALITIES TOP 201+

World Rank in SDG 5:

**Gender Equality: 201-300** 



UNIVERSITY SDG 5 GENDER EQUALITY **TOP 300** 

World Rank in SDG 9: Industry, Innovation and Infrastructure: 101-200



UNIVERSITY SDG 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE **TOP 200** 

World Rank in SDG 11:

Sustainable Cities and



UNIVERSITY SDG 11 SUSTAINABLE CITIES AND COMMUNITIES TOP 201+

### World Rank in SDG 12:

## Responsible Consumption and

**Production: 70** 



UNIVERSITY
IMPACT
RANKINGS

SDG 12 RESPONSIBLE
CONSUMPTION AND PRODUCTION
TOP 70

World Rank in SDG 16:
Peace, Justice and Strong
Institutions: 200+





# World Rank in SDG 13: Climate Action: 101-200





World Rank in SDG 17:

## Partnerships for the goals:





## QS Asia Ranking - 2019



NED University (Out of approximately 12000 Universities)



in Academic Reputation



in Employer Reputation



in Outbound Exchange



ASIAN UNIVERSITY RANKINGS

> in Inbound Exchange

## **UI Green Metric World University Ranking 2018**



by Campus Setting – Urban



Energy and Climate Change



Setting and Infrastructure



Green Metric World University Rankings

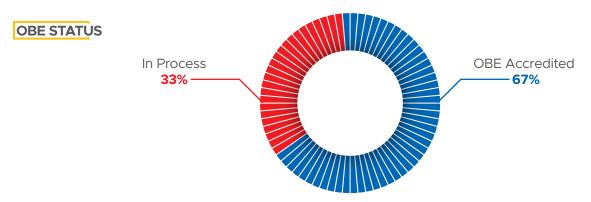
# ACADEMICS





## at **NED** University

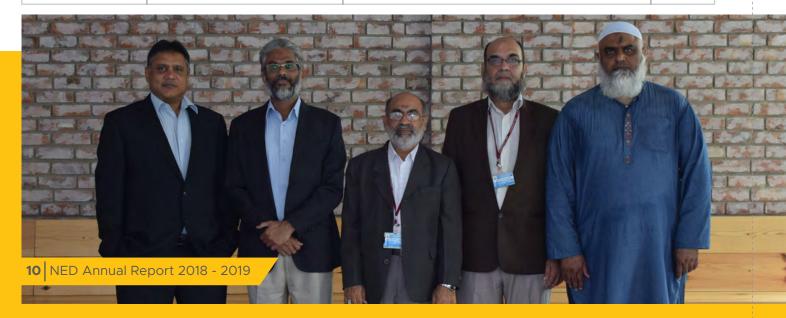
NED University has 26 teaching departments from six faculties, offering 28 undergraduate and 44 masters programmes. Seventeen teaching departments also offer PhD degree. NED University has decided to transform all undergraduate programmes on outcome-based education (OBE). Twelve Undergraduate programmes have already obtained OBE-based accreditation from Pakistan Engineering Council (PEC) and the accreditation for all other engineering programmes is in process.



### FACULTY OF CIVIL AND PETROLEUM ENGINEERING (CPL)

The Faculty has a history of contributions to the scientific knowledge as well as provision of professional answers to various issues related to build infrastructures. The strives to produce professionals for providing leadership in their respective areas.

DEPARTMENT	UNDERGRADUATE	MASTERS	PhD
Civil Engineering	B.E Civil Engineering B.ECivil (specialization in Construction Engineering)	M. Engg. Structural Engineering M. Engg. Geo-Tech Engineering M. Engg. Transportation Engineering M. Engg. Coastal & Water Resources Engineering MEM Construction Management	Yes
Urban and Infrastructure Engineering	B.E Urban Engineering	MEM Transportation Infrastructure Management	Yes
Petroleum Engineering	B.E Petroleum Engineering	M. Engg. Petroleum Engineering	
Earthquake Engineering		M. Engg. Structural Earthquake Engineering	Yes



at NED University

## FACULTY OF MECHANICAL AND MANUFACTURING ENGINEERING (MME)

The Faculty offers cutting edge and industry-oriented degree programmes. The Faculty have sustained strong industrial linkages through planned and focused initiatives. Efforts are made to inculcate leadership qualities in graduates along with making them technically sound.

DEPARTMENT	UNDERGRADUATE	MASTER'S	PhD
Mechanical Engineering	B.E Mechanical Engineering	M. Engg. Design M. Engg. Energy Systems M. Engg. Mechatronics M. Engg. Renewable Energy MEM Energy and Plant Management	Yes
Textile Engineering	B.E Textile Engineering BS- Textile Sciences	MEM Textile Management MS Textile Management	Yes
Industrial and Manufacturing Engineering	B.E Industrial and Manufacturing Engineering	M. Engg. Manufacturing Engineering MEM Industrial Management MEM Quality Management MEM Supply Chain Management	Yes
Automotive and Marine Engineering	B.E Automotive Engineering		



## at NED University

## FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING (ECE)

The Faculty is privileged to host state of the art laboratories under four National Centres. In addition to core teaching responsibilities, the Faculty is heavily involved in industrial design, repair and consultancy services through its Instrumentation Centre, Smartgrid Lab and Electronic Design Centre.

DEPARTMENT	UNDERGRADUATE	MASTER'S	PH.D.
Electrical Engineering	B.E Electrical Engineering	M. Engg. Electrical Power Systems MEM Energy Management	Yes
Computer and Information Systems Engineering	B.E Computer Systems	M. Engg. Computer Architecture & Systems Design M. Engg. Computer Network & System Security MS Data Engineering and Information Management	Yes
Electronic Engineering	B.E Electronics B.E Telecommunication	M. Engg. Micro System Design M. Engg. Industrial Electronics M. Engg. Telecommunications Engineering MS Telecommunications Systems	Yes
Bio-Medical Engineering	B.E Biomedical Engineering	M. Engg. Bio-Medical Engineering	Yes





at NED University

## FACULTY OF INFORMATION SCIENCE AND HUMANITIES (ISH)

The Faculty offers most of the non-Engineering programmes at the University except Software Engineering. These programmes offer outstanding avenues of knowledge and career prospects. Research, outreach and networking articles are also significant and visible.

DEPARTMENT	UNDERGRADUATE	MASTER'S	PH.D.
Software Engineering	B.E Software Engineering		
Computer Science & Information Technology	B.S Computer Science & Information Technology	MS Computer Science & Information Technology MS Information Security	
Mathematics	B.S Computational Finance	MS Applied Mathematics	Yes
Physics	B.S Applied Physics	MS Physics	
Chemistry	B.S Industrial Chemistry	MS Industrial Chemistry	Yes
Humanities	B.S English Linguistics	MS Applied Linguistics	Yes



## at NED University

## FACULTY OF CHEMICAL & PROCESS ENGINEERING(CPE)

This is relatively a newly established Faculty but equally expansive in its scope. The dedication of faculty and staff have helped achieving remarkable success in making their impression with academic excellence and professional preparation of their students.

DEPARTMENT	UNDERGRADUATE	MASTERS	PhD
Chemical Engineering	B.E Chemical Engineering	M. Engg. Chemical Engineering MEM Chemical & Process Management	Yes
Materials Engineering	B.E Materials Engineering	M. Engg. Materials Engineering	Yes
Metallurgical Engineering	B.E Metallurgical Engineering		
Polymer and Petrochemical Engineering	B.E Polymer & Petrochemical Engineering	M. Engg. Polymer Engineering	
Food Engineering	B.E Food Engineering	M. Engg. Polymer Engineering	
Environmental Engineering		M. Engg. Environmental Engineering MEM Environmental Management	Yes



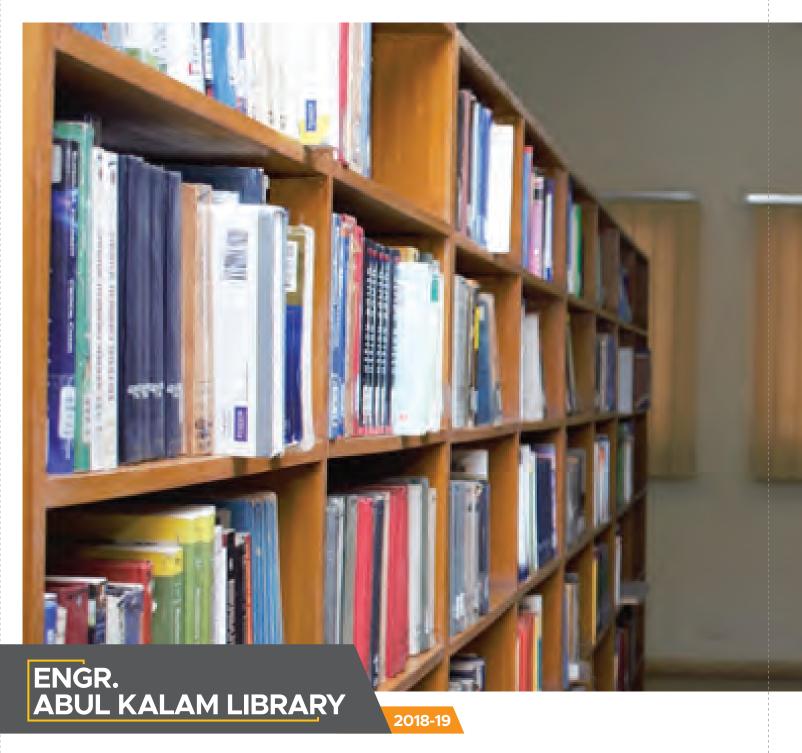
at NED University

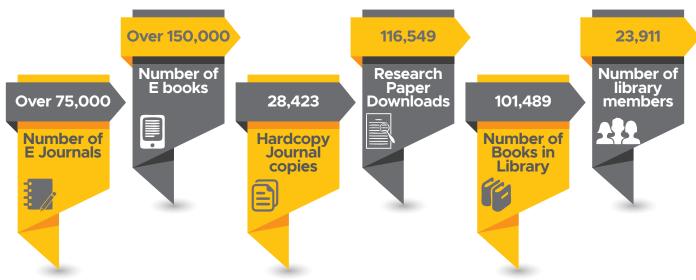
## FACULTY OF ARCHITECTURE & MANAGEMENT SCIENCES(AMS)

The Faculty offers undergraduate and post graduate programmes and actively engaged in research focusing on heritage conservation, urban development, regional planning and applied economics.

DEPARTMENT	UNDERGRADUATE	MASTERS	PhD
Architecture and Planning	BE - Architecture B.S Development Studies	Master of Urban & Regional Planning Master of Architecture (M. Arch.)	Yes
Economics and Management Sciences	B.S Economics & Finance B.SManagement Sciences	MS Economics and Finance	









## **TECHNOLOGICAL INFRASTRUCTURE**

The NED University's Information Technology Department (ITD) has played a pivotal role in developing the varsity's I.T. infrastructure providing robust Information Systems, Communication and High Performance computing facilities to its users within the university and outside it. Equipped with state of the art equipment backed by fibre optic core network, the Information Technology Department acts as the I.T. hub. Following are the key aspects of the technological infrastructure at NED University.

- Smart University with Global EDUROAM: NED University has successfully launched smart university project in April 2019. This important project has offered both indoor and outdoor fast Internet services with all associated services (Digital library, software etc) to all staff, faculty and students. Furthermore the smart university project has made NEDUET member of the international educational roaming project EDUROAM. EDUROAM is an international roaming service working in 101 countries for users in research and higher education. This service provides researchers, teachers and students secure and high speed Internet access when visiting an institution other than their
- NEDUET Data Centre: State-of-the-Art data centre with 5 server racks along with 3 network racks with capacity to host 90 servers at 4.8Gbps backed by a total fibre optic distribution plane.
- Digital Library: Provides access to high quality research journals and E-books
- **PERN:** The main Internet connectivity of NEDUET is facilitated by PERN. The network provides inter-campus, interdepartmental, intradepartmental, and external connectivity through optical fibre links.
- NEDUET-WiFi Network: WiFi connectivity with Campus-wide coverage powered by captive portal, the iAccess. Thus providing accessibility to LAN and WAN services through WiFi enabled mobile devices.
- NEDUET Email Service: NEDUET offers secure Email service to its employees. The Email server is deployed in the NEDUET NOC and has up to 2000 accounts.
- Video Conferencing: A centrally-located Video Conferencing Facility Centre connects NEDUET, locally and internationally for the arrangement of virtual classes, conferences, seminars, Internet meetings (video conferences) among multiple locations
- Campus Management System: NEDUET Campus Management System aggregates information from various MIS and present it to the end user through single consolidated interface completely personalized and role based in a robust and secure manner.
- **Web Portals:** NEDUET Campus Management System covers portals for Alumni website and Alumni Administration Interface; Researcher's Web; Finance; Examination; and library



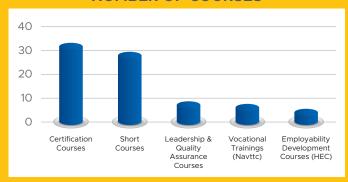
NED Academy has been the pivotal wing of NED University since the last 2 decades for continuous professional capacity building. NED Academy is registered with Pakistan Engineering Council as Professional Engineering Body (PEB) and hence courses conducted by NED Academy are valid for earning CPD points for engineers. The focus of NED Academy has been "Empowering for Professional Excellence" via continuous offerings of market based globally savvy training programmes ranging in diversity for the energetic youth to professional engineers to middle-tier managers to seasoned top leadership of organizations.

During 2018-19, NED Academy executed/ facilitated in the execution of following streams of courses:

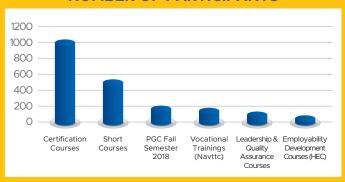
- 1. Professional Certification Courses
- 2. Professional Short Courses
- 3. Postgraduate Certificate (PGC) Courses
- 4. Employability Development Courses (in collaboration with HEC)
- 5. Vocational Training Courses (in collaboration with NAVTTC)
- 6. Corporate Trainings
- 7. Foundation Courses for PMA Graduates

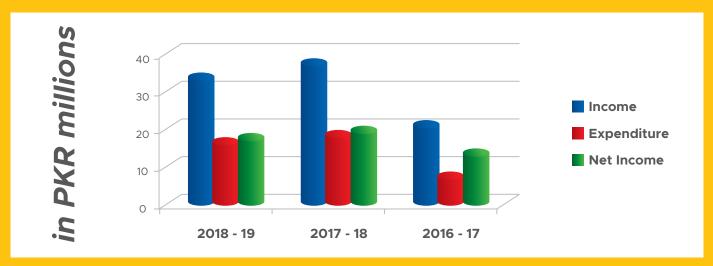
Approx. 2034 participants were facilitated via the courses offered during 2018-19, including 630 industry/ professional participants, 720 undergraduate students, 189 postgraduate students, 150 vocational training students and 345 students from unemployed/ unskilled youth.

#### NUMBER OF COURSES



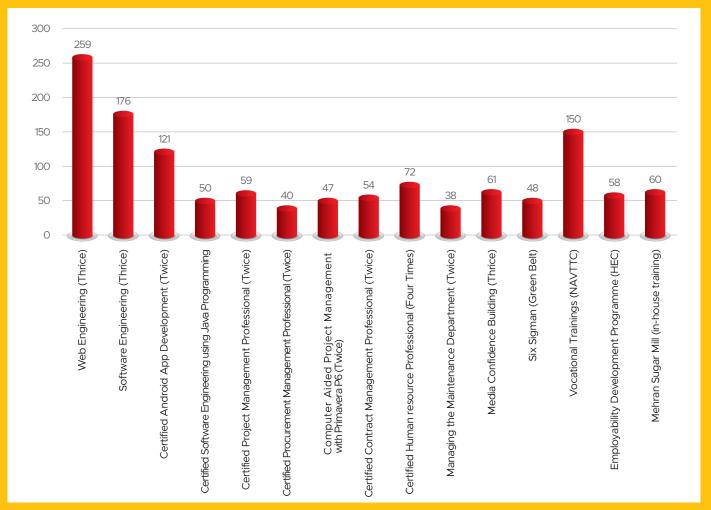
### NUMBER OF PARTICIPANTS



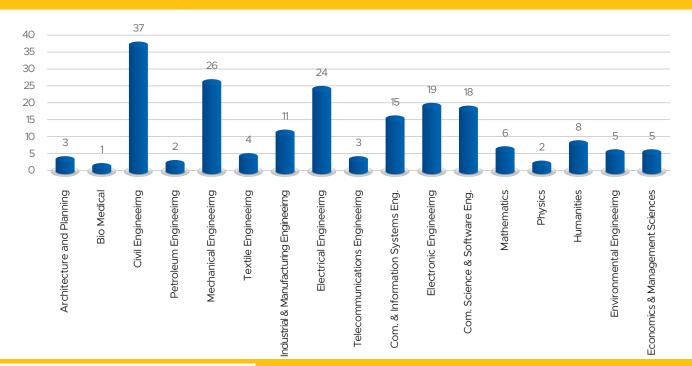


# **NED ACADEMY**

## Few Featured Professional Courses & Participation



## Postgraduate Certificate Courses Enrolment Fall 2018



# FACULT











Total PhD Faculty



PhD enrolled faculty (International)



PhD enrolled faculty (national)



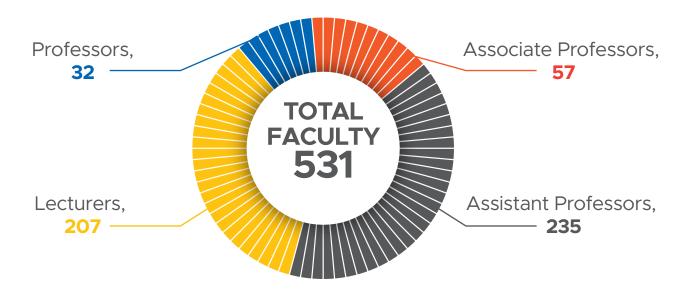
This year PhD addition



## **DESIGNATION WISE FACULTY MEMBERS**

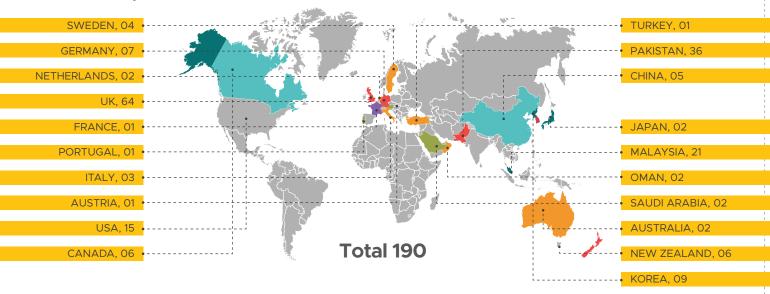
There are a total of 531 faculty members at NED University, out of which 190 (35.8%) are PhD holders. In addition the local faculty members NED University hosts 19 International faculty members out of which 18 native Chinese teachers are undertaking teaching requirements for the Chinese Language Programme. The designation wise break up of Faculty is as follows:





## PhD FACULTY

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.

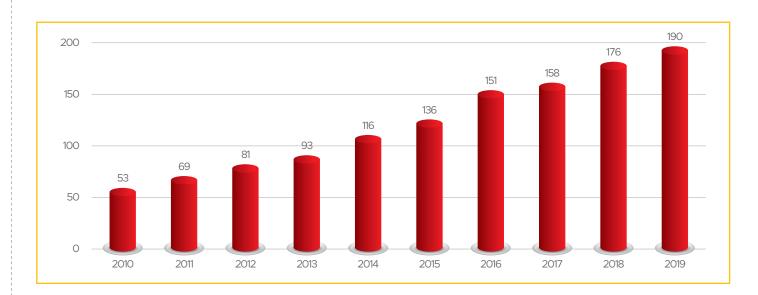


## PhD FACULTY ON STUDY LEAVE

There are currently 116 faculty members pursuing PhD 52 of those are doing so abroad in seventeen different countries.



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



# **FACULTY AWARDS**

ORGANIZATION	AWARD	RECIPIENT
Government of Pakistan	Pride of Performance	Dr. Sarosh Lodi
Asian Civil Engineering Coordination Council (ACECC), Japan	ACECC Award for the design and construction of earthquake-resistant houses in Balochistan)	NED University and Government of Balochistan
Asian Civil Engineering Coordination Council (ACECC), Japan	Lifetime Achievement Award	Prof. S.F.A. Rafeeqi Former Pro Vice Chancellor, NED University
NEDAASC Awards	Best Teacher Award	Dr. Sajida Zaki
NEDAASC Awards	Best Teacher Award	Dr. Muhammad Mubashir Khan
NEDAASC Awards	Best Teacher Award	Dr. Muhammad Owais Raza
NEDAASC Awards	Best Teacher Award	Engr. Muhammad Farooq Siddiqui
Tiajin Polytechnic University	Travel Grant Award	Dr. Muhammad Owais Raza
Tiajin Polytechnic University	Best Paper Presentation	Engr. Farhana Naeem
NEDAASC Awards	Best Research Paper Award	Dr. Muhammad Dawood Husain
NEDAASC Awards	Best Research Paper Award	Dr. ShehnilaZardari
NEDAASC Awards	Best Research Paper Award	Dr. Bilal Zahid
NEDAASC Awards	Best Research Paper Award	Dr. Muhammad Owais Raza
Institute of Engineers Pakistan	Best paper award	Engr. Ehtisham ul Haque
IFGICT- International Federation of Global and Green Information Communication Technology.	Green IT Professional Award	Dr. Ali Ismail

## **FACULTY SCHOLARLY CONTRIBUTIONS**

In addition to the research activities at the University, faculty members actively participate in the scholarly activities nationally and internationally as summarized below

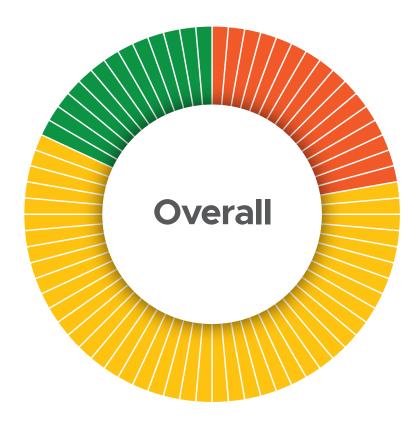


# STUDENTS



## **ADMISSIONSAND ENROLMENT**

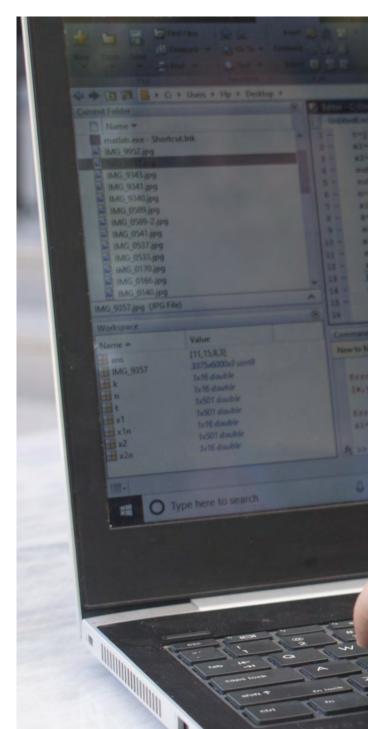
- A total of 2387 candidates succeeded in securing admissions in undergraduate Programmes at NED University after qualifying the entry test with a healthy proportion of 39% female students. Total undergraduate enrolment for 2018-19 stands at 9,397 with 39.9% female students.
- In various postgraduate Programmes, a total of 933 students received admission. This year intake consisted of about 26% female cohort. Total 2,326 Masters Students were enrolled during 2018-19, of which about 24.7% were female students.
- A total of 47 fresh PhD students were admitted in two postgraduate intakes this year, taking total existing enrolment to 184.

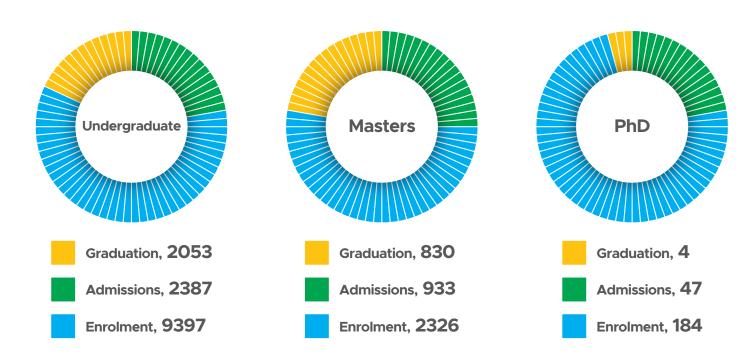


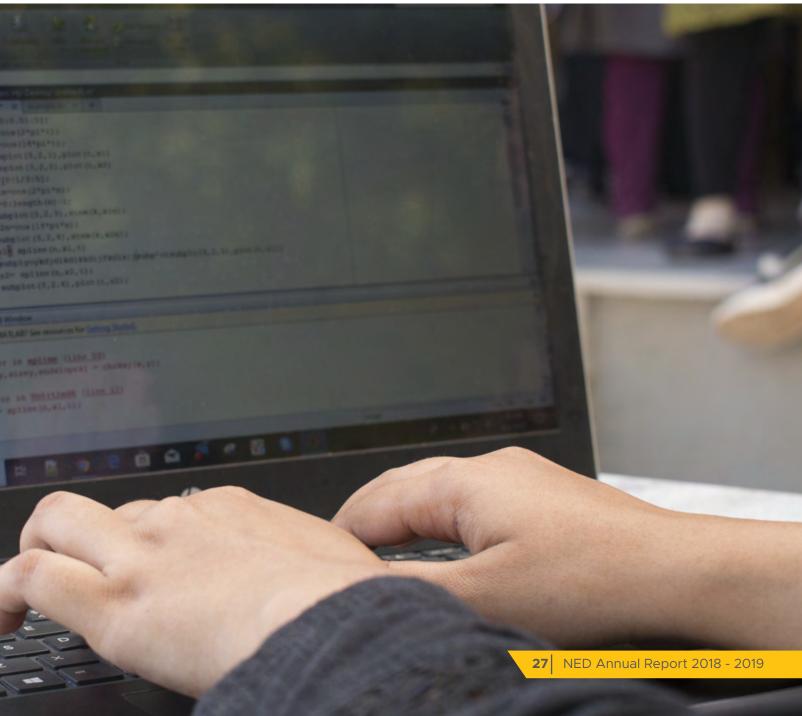












# **CONVOCATION 2018-19**

The Convocation 2018-19 of the NED University of Engineering and Technology was held on Saturday, 12th January, 2019 presided over by the Governor Sindh and Chancellor of the University Mr. Imran Ismail. Renowned Entrepreneur, motivational speaker and NED University Alumnus Mr. Ashraf Habibullah was the chief guest and Chief Minister Sindh, Murad Ali Shah attended as the guest of honour.

In all, 2,887 degrees were conferred this year. Among the degree holders, 2,053 were undergraduate, while 830 received masters degrees. Four scholars – Gul Muhammad, Saad Qasim, Maria Waqas and Kashif Ali – received Ph.D. degrees during convocation 2019. This year's graduation saw 4% increase from previous year graduation of 2,786 students. 34% of all undergraduate degree holders were female, while the ratio for female postgraduates was 27%.







# SCHOLARSHIPS



worth of financial assistance was extended to







# INDUSTRIAL OUTREACH

1,270

Internships opportunities provided during Ramadan Break.

1,402

Internship opportunities were provided during Summer Vacations.

54

Industrial/ study visits were arranged.

626

Industrial projects for final year students.

36

On-campus Job placement events.







- 15 students from **NED University** went to US, China and Japan on outbound student exchange this year.
- Over **50 Inbound students** visited **NED University.**





# STUDENTS AWARDS AND ACHIEVEMENTS

- Group of students from Electronics Department won 1st Position out of 600 projects in national project presentation and competition EXON 2.0.
- Fariya Nasir a student of NED University won 1st prize in the Institute of Architects Pakistan Photography competition titled "Fading Envelopes".
- NED University SPE Student Chapter won Student Chapter Excellence Award for 2019 which is second highest honor a student chapter may receive.
- Komeil Sadeghi a student from Electrical Engineering won 2018/19 IET Present Around the World competition – Karachi Heat.
- NED University Team "Skyline Falcons" won 2nd prize in 14th Design Build and fly competition (DBFC) organized by GIKI.
- Group of students from Mathematics Department won 2nd Position in project presentation in Information Technology Exhibition and Competition (ITEC-2018)
- Group of students from Textile Department won special prize in DICE TEXTILE 2018
- Two students from Humanities department got recognition for their public speaking and reading/writing capabilities.
- Undergraduate students from Urban department made research publication in international journal listed in JCR
- Students from Architecture Department prepared a scaled model of Lady Dufferin Hospital and Frere Hall.
- Team Quaid, representing NED University, has won the National PetroBowl Championship 2019 held from 10-11 April in Karachi.







# RESEARCH



**124** ongoing projects



Rs. 762 million ongoing projects grant



20 state of the art research Centres



• 338 International Journal Publications



■ • 198 papers published in JCR Indexed journals



🔼 🖕 1 International conferences organized

# **RESEARCH PUBLICATIONS**



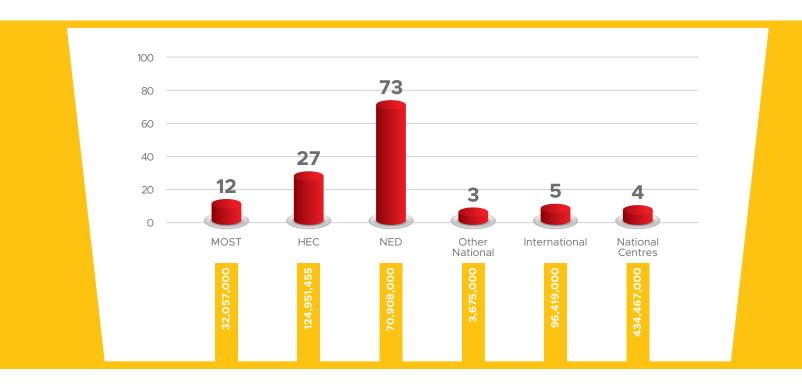


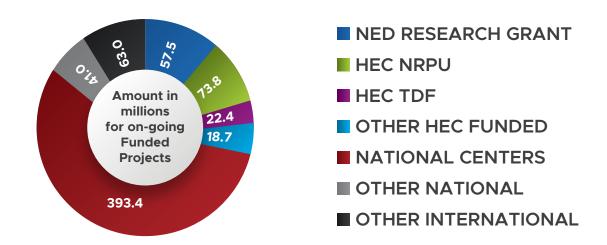
DISTRIBUTION OF JCR PAPERS IN MAJOR FIELDS OF SPECIALIZATIONS

## RESEARCH PROJECTS

Research remains at the forefront of the NED University focus. Faculty competes extensively in national andinternational 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, 124 research projects are currently on-going worth Rs. 762 Million. The diverse research portfolio of NED University has resulted in securing funding to establish four Centres of excellence of national level. Currently, there are 73 projects internally funded by NED University in addition to 51 projects funded by external agencies as illustrated below:





# RESEARCH AND CENTRES OF EXCELLENCES

O1. Norwegian Centre for Petroleum Studies	NED University Virtual Reality Centre
O2. Advanced Materials Testing Lab	National Centre for Cyber Security 12.
PanjwaniHisaar Water Institute	Electronic Design Centre 13.
Cowasjee Earthquake Centre	K Electric Lab
National Centre for Artificial Intelligence	Centre for Software Research and Development (CSRD)
National Incubation Centre Karachi	DICE Energy Centre 16.
O7. Smart Grid Lab	National Centre for Big Data Analytics
National Centre for Robotics and Automation	Building Information Modeling Centre
09. Instrumentation Centre	Product Development Centre 19.
High Performance Computing Centre	Heritage Cell (Architecture)

### **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 international forum for the dissemination of research and new developments and their applications in engineering 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**

Eleven international conferences were organized during 2018-19, which were attended by several national and international keynote speakers, authors and delegates. Some of these conferences are into their eighth or ninth rounds, attracting diversified contributions in subject areas:

August 1 - 2, 2018	First International Conference on Fourth industrial revolution (IC4IR)
October 10-11, 2018	DICEEW18 - DICE Energy & Water 2018 event
December 5-6, 2018	ICONICS'18 – 2nd International Conference on Innovations in Computer Science & Software Engineering
December 7 & 8, 2018	International Conference on Sustainable Development through Innovation in Economics and Management Sciences (ICSDIEMS-2018)
December 15, 2018	14th International Conference on Construction Industry- ICCI Innovation & Technology for Building Construction - The Way Forward
December 20 & 21, 2018	First International Conference on Carbon Neutral Built Environment - A Step Towards Sustainable Future
January 25 & 26, 2018	IEEC-2019 (ASPIRE) – 4th International Electrical Engineering Conference
February 21 - 22, 2019	First South Asia Conference on Earthquake Engineering
February 23 - 24, 2019	10th International Civil Engineering Conference (ICEC 2019)
March 15 & 16, 2019	3rd International Conference on Urban and Regional Planning (CURP) – 2019
March 15 & 16, 2019	9th International Conference on Mechanical Engineering









### OFFICE OF RESEARCH, INNOVATION AND **COMMERCIALIZATION (ORIC)**

The objective of the establishment of ORIC is to develop, expand, enhance and manage the university's research programs and to link research activities directly to the educational, social and economic priorities of the university and its broader community.

In pursuit of this mission the ORIC has the responsibility of guaranteeing that all research programs and policies reflect the core values of academic freedom, professional integrity and ethical conduct and full compliance with all policies, legal requirements and operational standards of the university.



In short, the ORIC seeks to enhance the environment for all research and scholarship by:

- Supporting the university's strategic research directions and policies
- Increasing and diversifying external research funding
- Improving recruitment and retention of top faculty
- Improving integration of research and education at all levels of the university
- Improving translation of research into the public benefit
- Strengthening university-industry relationships
- Promoting entrepreneurship, technology-transfer and commercialization activities that energize and support the local and national economy
- Promoting and enhancing cross-cutting and multi-disciplinary research initiatives.

# **QUALITY ASSURANCE**

ISO 9000 certified since 2002

- Successfully transformed to ISO9001:2015 standard
- QEC in 'W' category (95.33% Score in HEC ranking)
- **24** Trainings arranged with 1264 participants
- QECs established in all affiliated institutions



### **QUALITY ASSURANCE**

Quality enhancement Cell 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 2018-19.

### **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 95.67% with a placement in 'W' Category.

### **FACULTY DEVELOPMENT PROGRAMME**

36 hours training especially conducted for the newly appointed lecturers of various departments held between 27th November to 24th December, 2018, the details are given below:

S#	TRAINING TITLE	TRAINER
01	<b>Effective Teaching Practices</b>	Prof. Dr. Sajida Zaki, Chairperson, Humanities Department
02	Presentation Skills	Dr. Muhammad Fareed, Assistant Professor, Humanities Department
03	Teaching and Learning through Technology	Dr. Muhammad Mubashir Khan, Associate Professor, CSIT Department
04	Quality Management System	Dr. Muhmmad Aslam Bhutto, Ag. Director QEC/ Asst. Professor, Civil Engineering Dept.
05	Importance of Journal publication	Prof. Dr. M. Masood Rafi, Chairman, Earthquake Department
06	How to write the research proposal	Prof. Dr. Rizwan U. Farooqui, Professor, Civil Engg. Dept.,/ Director NED Academy
07	Outcome Based Education (OBE) System Design	Prof. Dr. Abdul Jabbar Sangi, Professor, Dr. Farrukh Arif, Associate Professor, Civil Engg. Department
08	HEI Ranking and University Level KPIs	Dr. Muhammad Wasif, Deputy Director QEC/ Asst. Professor, IMD
09	Class Management	Dr. Muhammad Wasif, Dy. Director QEC/ Asst. Professor, IMD
10	Patent Writing	Ms. Urooj Fatima, Patent Officer, IPO

### CAPACITY BUILDING

Another important activity of Quality Enhancement Cell is planning and arrangement of various training Programmes/workshops according to the requirement of departments. 24 training programmes were conducted during the period,9more trainings will be scheduled till June 2019. Such as OBE Based Course Design Workshop, Leadership and Management Skills, How to Develop SAR as per OBE guidelines for PEC accredited programmes, HEI Ranking and University Level KPIs etc.

### **QUALITY ASSURANCE**

#### **SELF-ASSESSMENT REPORTS (SARS)**

Self-assessment is an important tool for academic quality assurance and provides feedback for faculty and administration to initiate action plans for improvement. As per the HEC directives, second assessment cycle of 16 Masters Programmes have been completed; SARs of 14 Masters and 16 PhD Programmes along with two new PhD Programmes are in progress.

### **YEARLY OBJECTIVE 2019**

The yearly objective 2019 for all teaching departments is: "Implementation of OBE Management Information System Teaching Departments". Under the objective all teaching departments offering BE Progremmes are required to undertake the activities as mention in the action plan of the set objective during the year.

#### **EXTERNAL AND INTERNAL AUDITS / ASSESSMENTS**

QEC arranged two Surveillance Audits and two Internal Quality Audits during the reporting period.

SELF-REVIEW of (a) Institutional Performance Evaluation (IPE) (b) Masters and PhD Programmeshas been conducted on 18th and 19th of March 2019 by Review Panel comprising of three teams under the convener ship of Prof Dr. Muhammad Tufail, PVC, NEDUET and Prof. Dr. Razak Mahar, Dir. QEC, Shah Abdul Latif University, Khairpur (Co-Convener) (External Member).

#### Faculty Development Training held on 27th November to 24th December 2018



#### Importance of Feedback Analysis held on 20th July 2018



Self-Review of (a) Institutional **Performance Evaluation** 



Self-Review of (b) Masters and **PhD Programmes** 





#### Co-curricular and Extra-curricular

NED University pays significant attention to providing its students ample opportunities for activities beyond academic endeavors through various activities. NED University encourages its students to actively participate in the technical sessions and other co-curricular activities.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. The list below is a snapshot of some activities conducted over the reporting period.

### **EVENTS ORGANIZED BY ACADEMIC DEPARTMENTS**

- ITEC 2018 Information Technology Exhibition & Competition (ITEC) organized by ACM student 01 Chapter and CSIT Department
- 02 STEAM (Science, Technology, Engineering, Arts and Mathematics) A session on educational approach to learning organized by ACM student Chapter and CSIT Department
- 03 DevOps Transformation Session Awareness session on transformation to DevOps culture organized by ACM student Chapter and CSIT Department
- **04** Seminar on P&ID by Dr. Zahoor-ul-Hussain Awan O3rd August, 2018
- 05 Seminar on "Industrial Safety and International Certification" by Dr. Zahoor-ul-Hussain Awan 16th January, 2019
- 06 Seminar on DCS Operations by Dr. Zahoor-ul-Hussain Awan 23rd January, 2019
- 07 Workshop on Fabrication of Dye Sensitized Solar Cells-2018 organized by Electronic Engineering Department 9-10 August, 2018
- **08** QUANTS Society orientation session for Batch 2018
- 09 Training Session for Investment Management by AKD Investment Co. organized by QUANTS Society
- 10 Computational Finance first Alumni meet up and Alumni presentations about their job experience
- 11 Seminar on Entrepreneurship by Final year students of Metallurgical Department
- 12 AATCC CAREER SEMINAR 2018 To create awareness in the students regarding career opportunities in textiles
- 13 TECH FEST 19-Virtual reality, Haptic, Data analytics, Quantum computing organized by SENTEC
- Seminar on Composite Machining by SME Student chapter 14
- SME Orientation session for new batch 15
- 16 Seminar on Marketing - How to perform marketing for management science organized by SME Student chapter

## STUDENT ACTIVITIES

#### Co-curricular and Extra-curricular

- 17 Brainiac Technical, Quizzes, Seminar and Workshops organized by ASME student chapter
- **18** KHOAJ-VII Workshop by ASHRAE (NEDUET)
- **19** ASME Orientation Session by ASME (NEDUET)
- 20 Ignite 3.0 Session on how to increase engineering skills by ASME (NEDUET)
- 21 Orientation Session -ASHRAE (NEDUET)
- 22 Session on Aerial Escapade Practical aspects of theory by IMechE (NEDUET)
- 23 Session on Propeller Technical Knowledge by IMechE (NEDUET)
- 24 Speak out for Engineers (SOfE) Technical Presentation Competition for Engineering students by IMechE (NEDUET)
- 25 Abdul Kalam Design Challenge (AKDC 18) by IMechE (NEDUET)
- SOFE South Technical event for student to groom their speaking and presenting skills by IMechE (NEDUET)
- 27 Al Festival Artificial Intelligence Club organized its first national Al festival in 14th Nov 2018.
- 28 IEEEP Students' seminar Students participated as volunteers in organizing 34th All Pakistan IEEEP Students' Seminar on 15th January 2019, at NED University.
- 29 Traffic Safety Awareness A Community Service activity jointly organized by Urban Engineering Department, Students Affair Department and Motorway Police Department.
- 30 Independence Day Celebration with Motorway Police 14th August 2018.
- 31 Clean and Green Urban 2019 The campaign was launched on 21st January 2019 in which new plants were planted while exiting plants were cleaned in Urban Engineering Department.
- **32** Urban Day 8th August 2018 Presentation and Poster competition was conducted among the students.
- 33 Seminar on Concrete application and Advancement in Concrete Technology by Department of Urban and Infrastructure Engineering in collaboration with BASF Pakistan held on 4th December 2018.
- 34 Bamcrete 1.0- Competition to design a bamboo reinforced concrete beam as a flexural member by ACI NEDUET Students Chapter(16th January 2019)
- Arcon 1.0 Competition to design, construct and test a concrete structure reinforced with Steel reinforcementbyACI NEDUET Students Chapter (8th August 2018)
- 36 Session 'Toastmasters: Developing the leader within you' arranged by Dept. of Humanities & Applied Linguistics Club(18th November 2018)



- An Insight to Power Generation The Event was organized by IET in collaboration with EED comprising of industrial talks by experts from Schneider, Kanope, Siemens IET / EED.
- Seminar on transforming present Grid into Future by Electrical Department 38
- Workshop on Lighting System Design using DIALUX 4.13 by IEEE Power & Energy Society 39 **NEDUET Branch**
- 40 Session on Poetry and Philosophy of Iqbal at Department of Architecture & Planning on 13th November 2018
- 41 Pursuit - Job fair for Students of Development Studies (14th Dec 2018)
- Petrobowl Competition A petroleum related quiz competition organized by SPE NED Student Chapter
- 43 Session on 4th Industrial Revolution by Economics & Management Sciences Department
- Session on Islamic Finance Speaker by Economics & Management Sciences Department
- Session on building a successful career by Economics & Management Sciences Department 45



by Student Affairs Department

- 01 NED Green Campus & Carbon Neutral Initiative 5th July 2018
- International Day against Drug Abuse and the Illegal Drug Trade 9th July 2018 02
- Water Resource Management 11th July 2018 03
- 04 NEDMUN V 13th to 15th July 2018
- **O5** Photography Society Event Behind the lens 2.0 17th July 2018
- Plantation for Green Pakistan 17th July 2018 06
- Mega Project Exhibition & Robotic Competition MPERC 18th & 19th July 2018 07
- 80 Healing Soul Project 31st July & 1st August 2018
- Indus Blood Donation Camp 1st & 2nd August 2018 09
- 10 A Narration Contest To Celebrate The Life And Works Of Mr Mushtaq Ahmed Yousufi 6th August, 2018
- 11 Independence Day Celebration 2018 -13th August 2018,
- 12 National Flag Hosting Ceremony 14th August 2018

# **ACTIVITIES ORGANIZED**

### by Student Affairs Department

13	Defense Day Rally 6th Sep 2018,
14	Plant for Pakistan Telenor & Sustainable Tourism Foundation of Pakistan 18th Sep 2018,
15	Breast Cancer Awareness Session by Shaukat Khanum Memorial Trust 16th Oct 2018
16	Robotics Competition Edvon Robotics 20th Oct 2018
17	Orientation Programme& Carnival 25th Oct 2018
18	Condolence Reference regarding Yaseen Gadet 29th Oct 2018
19	Speech by Najam Usmani on "Seven Habits of Highly Connected/Motivated People" 30th Oct 2018
20	University Symposium "Ambitions" 31st Oct 2018
21	HEC & Pink Ribbon Youth Awareness Seminar 2018 31st Oct 2018
22	Programme Yom e Hussain (RA) 7th Nov 2018
23	Training Session of National Cabinet III 9th Nov 2018 and 16th to 18th Nov 2018
24	NSA Presents Refreshing Theatre – Badshah o Badshah 12th Nov 2018
25	Education Guidance & Counseling Day 2018 - 19th Nov 2018
26	Session on Contribute to Countering Violent Extremism on Campuses 24th Nov 2018
27	Awareness Session Against the Harassment of Women at Work Place 30th Nov 2018
28	Anti-Corruption Walk 7th Dec 2018
29	National Voters' Day Walk 7th Dec 2018
30	India's BMD System & Its Impact on the Region 12th Dec 2018
31	Seminar on "Reliability Engineer LEAD" by Mr. Fazal Reham 18th Dec 2018
32	Aaghaz e Nau 1st Jan 2019
33	Mental Health Awareness 16th Jan, 2019
34	TECH FEST - 16th Jan 2019
35	Zaawiya - 17th Jan 2019 and 24th Jan 2019
36	Session on Opportunities for Pakistani Engineers - 25th Jan 2019
37	Roundtable Conference on Pakistan Economics & Security Challenges & Way Out - 13th Feb 2019

Regent Plaza Hotel Khi. RABITA FORUM

# **ACTIVITIES ORGANIZED**

#### by Student Affairs Department

38	Tree Plantation by NED Vice Chancellor - 18th Feb 2019 at Mazar-a-Quaid
39	Ageing & Development - 11th Mar 2019
40	Blood Donation Camp - 7th, 13th, 14th, 20thMar 2019

- A Tribute to Great Scientists 14th Mar 2019 41
- 42 Women Day - 15th Mar 2019
- 43 Inter University Debate Competition 18th Mar 2019
- 44 Peace of Mind 19th Mar 2019 NED Auditorium
- University Youth & UN/IAVE 2030 Sustainable Development Goal 19th Mar 2019 45
- 46 Pakistan Day Celebrations 27th Mar 2019
- GRE Training Session 27th Mar 2019 47
- 48 Beyond the Horizon 28th March 2019
- 49 Awareness session on Fulbright MS & PhD Scholarship 3rd April 2019
- 50 Behind the Lens (BTL-3.0) 17th & 18th April 2019
- NED Literature Festival 19, 51
- **52** All Karachi Bait Baazi Competition
- NSA Theater 1 NED Auditorium 53
- 54 SENTEC Week 2019 - Society for the Promotion of Science, Engineering and Technology
- 55 **NED MUN - Model United Nations**
- **56** Literature Week
- 57 A Day with NSA
- 58 Ishq-e-Adab
- All Karachi Conventional Debate 59
- **60** Echo Friendly Technology Event
- 61 Kashmir Solidarity Day
- 62 The Intra NED Allama Igbal Bilingual Declamation Competition
- Free Eye Camp Medical Centr 63
- Lecture Regarding Higher Studies Abroad University of Manchester 64
- Girls Picnic 2018 Dream World Resorts 65
- Cleanliness Activity & Placement of Dustbins in Main Campus 66
- Session on Robots Drones and Security O3rd May 2018 67
- 68 Tree Plantation 9th May 2018
- 69 Intra NED Parliamentary Debating Championship 12th & 13th May 2018
- 70 NED Talentia and Theater 14th May 2018
- 71 All Karachi Urdu Conventional Debate Competition 16th May 2018
- Day of Orphans 1st June 2018 Eidhi Orphanage Karachi 72



### SPORTS EVENTS WON BY NED UNIVERSITY

- Winner: Intervarsity ZABIST Olympiad 2019. Throw ball. (Girls).
- Winner: PAF KIET Intervarsity Basketball (Boys) Tournament 2019.
- Runner Up: Inter Collegiate Girls Basketball Tournament 2019
- 3rd Position: Intervarsity Cricket (Boys) Zone-G Championship 2018-19.
- Semifinalist: Intervarsity Badminton (Boys) Zone-G Championship 2018-19

### **NED UNIVERSITY PARTICIPATION**

- Intervarsity Table Tennis (Boys) Zone-G Championship-2018-19 25th to 27thNovember-2018 at IoBM, Karachi
- Intervarsity Football (Boys) Zone-G Championship 2018-19. 25th to 27th December 2018 at Igra University, Karachi.
- All Pakistan Intervarsity Basketball (Girls) Championship 2018-19. 30th Jan to 01st Feb 2019 at University of Karachi.
- Intervarsity Basketball (Boys) Zone-G Championship 2018-1927th Feb 2019 to 1st March 2019 at Greenwich University Karachi.
- DHA Suffa intervarsity cricket (boys) tournament 2019.

### SPORT EVENTS ORGANIZED BY NED UNIVERSITY

- Intervarsity Badminton(Boys) Zone-G Championship 2018-19
- All Pakistan Intervarsity Badminton (Boys) Final Round Championship 2018-19
- NED Inter Department Championship 2019 Volley Ball Boys Badminton Boys Futsal Boys Badminton Girls Table Tennis Girls
- Throw-ball Girls Tournament
- (RC Car) Competition organized by American Society of Mechanical Engineering (ASME).
- Robotics Championship organized by SENTEC Society,
- Propellair Championship organized by Institute of Mechanical Engineering (1MechE)
- Futsal Boys Tournament organized by Electronic Engineering. 6th & 7th August 2018.
- All Karachi peace Sports Fiesta Table Tennis (Boys) & Squash (Boys) tournaments
- Futsal (Boys) & Badminton (Girls) tournaments organized by NED Student Chapter of American Association of Textile Chemists and Colorists (AATCC)
- Inter Faculty Championship Badminton (Female) organized by NED Teacher Association.
- Inter Faculty Championship Cricket (Male) organized by NED Teacher Association.
- All Pakistan Intervarsity Basketball (Girls) Championship 2018-19
- Friendly Cricket Match NED VS IOBM
- Friendly Cricket Match NED VS Malir Gymkhana

# OUTREACH & NETWORKING



### STAFF MOBILITY AND **CONFERENCE TRAVELS**

NED University promotes and facilitates its faculty and staff in collaborating with national and international counterparts. University faculty and staff actively participate in international conferences and events. In the reporting period University faculty participated in 20 international conferences with a total of 157 international staff travels.









# PROMINENT NATIONAL AND 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.



Visit of hounrable **Chief Minister Murad Ali Shah** in March 2019



Honourable Governor Sindh, Mr Imran Ismail plants tree at NED University in January 2019



Visit of **Ms. Shahela Raza** during Thar Karachi Student Mobility Visit in December 2018



Visit of **Belgium Commerce** and **Trade Minister** in Nov 2018 for ground braking of Fire Lab.



Visit of **Mr. Ashraf Habibullah** in January 2019



Pak-UK Gateway Orientation Meeting in April 2019



Visit of **Chinese Delegate** in August 2018



Visit of **World Bank delegate** in January 2019

### **ALUMNI ENGAGEMENT AND SUPPORT**

- Project Library of the Urban Engineering Department was upgraded with the advanced computing systems and implemented database system named 'Student Project Management System (SPMS)'. This facility is upgraded with the generous contribution of NED Alumni Washington DC in December 2018, worth USD 10,000.
- In Industrial and Manufacturing Department, alumni and industry supported upgradation of infrastructure including LED displays, false ceiling, Water Cooler and Dispenser, Computing Equipment and renovation of Lawn (Support by IM Alumni, Feroze 1888, Bio Amla and Indus Motors)
- Alumni of Computer and Information Systems Department arranged Research Internship for students in Germany and Water filtration unit worth Rs. 100,000/-.
- Inauguration of Textile Engineering Computer laboratory by Soorty Textiles.
- NEDAASC funding for best teachers and best papers awards.
- NEDAASC funding for FYP projects.
- Generous support for NED University Scholarship Programmes.
- Various talks, seminars, and workshops were conducted at different departments





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. Following is the list of major agreements / MoUs.

### **AGREEMENTS:**



Zhongxing Telecom Pakistan (Pvt.) Ltd. (ZTE) for Supplying Installation Testing and Commissioning of Two Thousand Lines PHS Wireless local loop Network



Alternative Energy Development Board regarding research and Development of Fuel Cell Technologies



Pakistan Petroleum Ltd. (PPL)



Dow University of Health Sciences Karachi



Ricardo Software Master License Agreement FSAE



Siemens (Pakistan) Engineering Co. Ltd.



Ford Motor Company ("Ford")



Supernet Limited regarding Data Communication Services



Earthquake Model of the Middle East Region (EMME)



United Company of Pakistan Ltd.



National Testing Service (NTS)



Jersey Precast (JPC)



Habib Metropolitan Bank Ltd.



M/s. Pakistan Beverage Limited (Pepsi Cola).



Engro Polymer & Chemicals Ltd.



The ARAS Cooperation, University Program.



Consulting Support in Preparation of Process Design Packages



A & I Metadata Feed License Agreement



British Council, British High Commission.

### MEMORANDUM OF UNDERSTANDING



Queen Mary University of London



Asian Institute of Technology Bangkok,



Middle East Technology University Ankara Turkey



Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)



Scientific and Technology Cooperation between the Ministry of Science and Technology of the Islamic Republic of Pakistan and the Higher Council for Science and Technology of the Hashemite Kingdom of Jordan



**British Council** 



National Engineering & Scientific Commission (NESCOM)



Engro Chemical Pakistan Ltd.



Textile Research and Innovation Centre (TRIC)



City District Govt. Karachi for Cooperation in the field of Engineering Research and Development in Road Traffic Management and Safety



Naseeb Online Services (Pvt.) Ltd.



Sui Southern Gas Company Ltd.



Dogus University Istanbul, Turkey



Linkoping University (LiU) Linkoping, Sweden



Pakistan Marine Academy, Ministry of Ports & Shipping



Institution of Business Administration, Karachi (IBA)



Universitatea "Lucian Blaga" din Sibiu Romania



National Institute of Oceanography



Faculty of Engineering, University of Strathclyde



Erasmus Mundus Action 2 Programme, EMMA-WEST 2013



Universiti Sains Malaysia (USM)



Karachi Water and Sewerage Board Karachi, Pakistan



National Institute of Lasers and Optronics, Islamabad



A Joint Project of OPEN Karachi



K-Electric, Karachi, Pakistan.



Norwegian University of Science and Technology (Norway)



Pakistan Petroleum Ltd. (PPL)



The Pak Oasis Industries (Pvt.) Ltd.



The Promotion of Education in Pakistan (PEP) Foundation, Inc., USA



Ihsan Trust



Italian Development Committee (IDC).



Dawood University of Engineering & Technology, Karachi



UNDP Sponsored Project Component "CIU-Trucking, Pakistan Sustainable Transport" (CIU-TRUCKING-PAKISTAN, UNDP



Clothing and Design Faculty, Minjiang University, China



The AGH University of Science and Technology, Krakow, Poland



Tianjin Polytechnic University, China



Universiti Malaysia Perlis



Hasselt University Transportation Research Institute (IMOB)



The University of BOLTON



Pakistan Standards and Quality Control Authority



Pakistan Association of Automotive Parts & Accessories Manufactures



Confucius Institute University of Karachi



Provincial Coordination Unit Benazir Bhutto Shaheed Youth Development program BBSHRRDB board, Boards & Universities Department Govt. of Sindh



Brothers Engineering Industries



Asian Institute for Environmental Research and Energy



Think Transportation



Indus Motor Company Ltd.



NED Alumni Association of Southern California (NEDAASC)



Incheon - National University Republic of Korea



Management and Business Excellence Consultancy



Sindh Public Procurement Regulatory Authority, Govt. of Sindh



Shaanxi Institute of Technology, China



Hunan Polytechnic of Environment and Biology, China



Shandong Vocational College of Industry, China



Hunan College of Modern Logistics, China



Hunan Chemical Vocational Technology College, China



Gansu Forestry Technological College, China



Shandong Vocational College of Light Industry, China



Baotou Railway Vocational and Technical College, China



Hunan Automotive Engineering Vocational College, China



Hunan Petrochemical Vocational Technology College, China



Hunan Industry Polytechnic, China

**GPC** 

Guangxi Polytechnic of Construction, China

### **CHINESE LANGUAGE**

In order to meet the requirements of a technical and engineering manpower for the CPEC activities/projects, NED University as the first leading Engineering University of Pakistan introduced the Chinese language learning program as non-credit course (NC course) across the University. In the light of this decision, two courses i.e., HSK-I and HSK-II have been designed and made mandatory for all newly admitted students from batch 2017-18. **So far 2,207 students have passed HSK-II.** 



### **COMMUNITY SERVICE**

The University has made it mandatory for all the students admitted since 2018 to spend up to 40 hours in a designated task of community service. The aim of this important initiative is to provide first hand exposure to our student body about the prevailing socio-economic situation in the country and afford an option to make a practical contribution by engagement in an identified activity. So far, 2,880 students have successfully participated in different modules of activities with different welfare and governmental organizations.



# UNIVERSI SOCIAL RESPONSIBILITY (USR)

The University a part from being engaged in academic and research activities is also investing in other social activities mainly pertaining towards extending support to its employees, students, community an dim proving environment which are being managed under its University Social Responsibility (USR) programme. NED Alumni and several philanthropists are playing vital role for success of this NED USR.

Following are few snap stories of initiatives taken under University Social Responsibility:



Shuttles - NED University runs a fleet of 20 bus shuttles on various routes of the city. A nominal fee is charged to this heavily subsidized facility.



In collaboration with IEP Karachi, NED University has dedicated two shuttles which operate within campus to making campus mobility a comfortable experience

### **UNIVERSITY SOCIAL RESPONSIBILITY (USR)**



The University is running two water filtering units with the capacity of 10,000 gallons and 5,000 gallons per day for facilitation of employees, students and colony residents.



The Daycare Centre at NED University provides support for employees having young kids.



The University has extended a pick and drop facility for school going children from the colony at zero additional cost.



This 20,000 gallons per day waste water treatment plant propels waster conservation for the city without compromising the plea of making our campus a Green Campus.



The Cowasjee School at NED University is providing education from Class-I to Class-X with its current enrolment being around 400.



Blood Donation Camps are organized by Controller Students Affairs

# UNIVERSITY SOCIAL RESPONSIBILITY (USR)



Sports facilities extension for specially abled sportsmen



Commemorating World Book Day by NED University at local schools is an effort to uplift healthy reading culture among ourselves



Commemoration of World Heritage Day by Architecture Department at NED



Celebrating Science at Islamkot Thar, NED University drives STEM initiatives across the province – in collaboration with Thar Foundation



University in collaboration with Engro Foundation hasplanted trees within campus followed byplanting trees in Tharparker District. School children are also engaged for this activity.



The carbon neutral initiative of NED University is focused on improving overall environment by reducing / balancing the carbon footprint within its campuses.

# FEATURE ACHIEVEMENTS

- NED University Campus at Islamkot, Thar
- University International Advisory board
- National Incubation Centre Karachi
- National Flag Hoisting
- Block Chain Based Degree Verification System
- CO2 Smart Initiative
  - Higher Education Teachers Training

# NED UNIVERSITY CAMPUS AT ISLAMKOT, THAR

Government of Sindh has agreed to establish NED University Campus at Islamkot. This campus will be called as 'That Institute of Engineering, Sciences and Technology (TIEST)'. All relevant engineering and technological programmes will be launched in this campus. In the first phase campus will be started in a temporary location with some non-engineering programmes and after this new campus constructed (for which land site has been identified) these programmes will be shifted there.

Apart from academic and administrative blocks residential areas for faculty, officers, staff and the students will also be constructed.

This campus shall mainly benefit the students from Islamakot, Mithi and other parts of Tharparkar, in addition to those residing in Hyderabad, Badin and other districts of Sindh province. Seats for Karachi, Larkana and Sukkur will also be allocated.



# UNIVERSITY INTERNATIONAL ADVISORY BOARD

NED University has established an International Advisory Board through University Syndicate in order to set University direction. The purpose of having this board is to identify the areas of improvement and take University forward with the planned activities to meet futuristic national and international demands. The University desires to gain from the collective wisdom and experience of honourable board members. The first meeting of University International Advisory Board was held on 19th January 2019. Following are members of University International Advisory Board.

S#	CATEGORY	NAME	DESIGNATION
01		Prof. Dr. Sarosh H Lodi	Vice Chancellor
02	NED UET MEMBERS	Prof. Dr. Muhammad Tufail	Pro Vice Chancellor
03		Prof. Dr. Noman Ahmed	Dean nominated by VC
04	FOUR	Mr. Raghib Hussain	Executive Vice President and Chief Strategy Officer, Cavium, Inc. (NED Alumnus)
05	MEMBERS	Mr. Amir ul Islam	CEO/President of Jersey Precast
06	FROM OVERSEAS	Mr. Imran Ahmed Siddiqui	Council General, Consulate General of Pakistan  – Toronto
07		Mr. Aftab Hussain Siddiqui	Businessman / Politician
08		Mr. Asad Said Jafar,	CEO Philips, Pakistan
09	FOUR MEMBERS	Mr. M. Siddique Memon,	Ex-Chief Secretary, Sindh
10	FROM	Mr. Raja Sabri Khan,	C.E.O, Executive Integrated Dynamics
11	PAKISTAN	Mr. Sohail Bashir	Chief Operating Officer, Head of Engineering Saita (Pakistan) Pte. Ltd.
12	Secretary	Mr. Ghazanfar Hussain	Registrar



# NATIONAL INCUBATION CENTRE KARACHI

The National Incubation Centre Karachi is a Rs. 575 Million project which will be operated by LMKT with prime partnership of NED University. Other partners include, PTCL, Habib Bank Limited and Pakistan Poverty Alleviation Fund, PPAF. The funding for the centre is coming through the Ministry of IT&T and Ignite Fund under their National Incubation Center Programme. Along with other facilities, incubating startups businesses at NIC Karachi will have access to a Design Studio, NED University's Makers' Lab and a Fintech Centre, a result of HBL's collaboration on the project.

The NIC in Karachi, aims to provide incubation services for over 200 next-generation businesses in the first five years, will empower aspiring Sindh-based entrepreneurs to create high-growth and sustainable businesses. In addition, it will also provide talented entrepreneurs and promising startups from the Sindh region quality incubation programs; access to mentor and investor networks; and technical resources. In 2018-19 NIC Karachi facilitated 29 start ups and hosted dozens of seminars and workshops.







### **NATIONAL FLAG HOISTING**

National Flag Hoisting Ceremony of Pakistan's tallest National Flag in any University was held on 14th August 2018 at NED University main campus. Chief Minister Sindh, Syed Murad Ali Shah was Chief Guest and renowned scientist and former chairman Higher Education Commission Dr. Atta ur Rehman was the Guest of Honour in the flag hoisting ceremony.

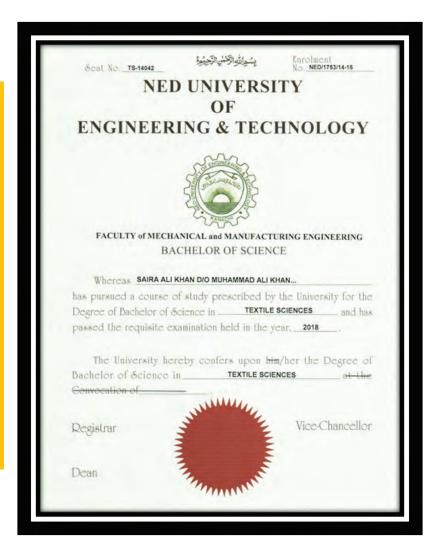






### **BLOCK CHAIN BASED DEGREE VERIFICATION SYSTEM**

NED University of Engineering and Technology, Karachi has launched a Blockchain Technology-based system for degrees verification. The system has been developed in-house with the technical support of BlockShift Technology, a startup of the NED University Alumni, that will help degrees' verification using Ethereum platform, an authenticated public blockchain through a unique ID from anywhere in the world. The system was inaugurated by Ms. Ava Ardeshir Cowasjee, Member University Syndicate along with Mr. Hakim Ali Talpur, Acting Regional Director, HEC Regional Centre, Karachi. Several reputed institutions including MIT (USA), University College London (UK), Southern New Hampshire University (UK), University of Melbourne (Australia), International Islamic University (Malaysia), ECPI University (USA) are among those institutions using this technology for degrees and certificates verification. This system saves me and cost and provide a swift mechanism especially for the institutions where graduates of the University are in process of seeking admission for higher education.





# CO<sub>2</sub> SMART INITIATIVE

The project initiated as Thar Karachi Student Mobility Campaign for reducing Carbon Footprint. This initiative has seen 70 students from twelve schools of Thar and Karachi to come together and plant trees on NED soil in December 2018. The same activity was reciprocated at Islamkot Thar in April 2019 where the students planted trees at Ansari Park near SECMC coal mines. The smart feature is that the carbon reduction by all individual plants is displayed live on the website.

The success of the project paved way for launching of a CO2 Smart Executive Club, where organizations, industries and renowned individuals can become part of a similar initiative and become visible online. The website is **co2smart.neduet.edu.pk.** The patron of the club is Honorable Governor Sindh, Mr. Imran Ismail.

# CO<sub>2</sub>SMART

A Project By NED University For Reducing Carbon Footprint of The Region Through Collective Efforts



CO2Smart Executive Club



Carbon Reduction Contribution Till This Moment (In Grams)

5130320679045

# HIGHER EDUCATION TEACHER TRAINING

Providing quality education to its student is top most priority of NED University. NED University takes all possible efforts to improve teaching and research capabilities of its faculty and staff. Quality Enhancement Cell arranges periodic trainings to ensure highest standards of teaching quality. Recently, University has initiated a mentorship programme in which senior faculty members provide mentoring to their juniors to groom their teaching and research capabilities.

In addition to all in-house efforts to ensure highest quality of teaching, a pool of five mentors have successfully completed an online capacity building course from Harvard University titled Higher Education Teaching Certificate. These mentors will implement the tools and techniques learnt from this course in NED University and improvise their teaching methodology to ensure better student learning. Moreover, these mentors will guide and help their fellow faculty in improving their teaching practices to further improve overall learning environment at the University.











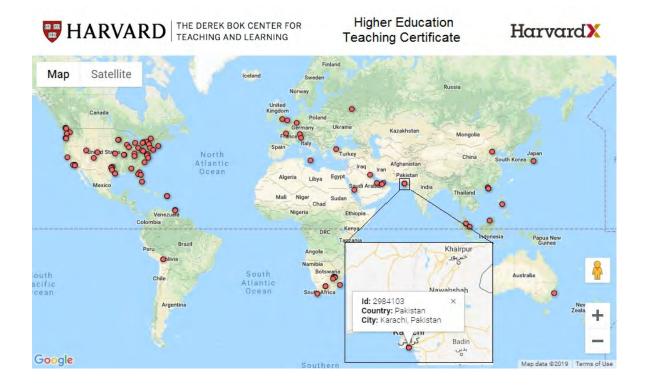
Dr. Huma Khalid

Dr. Imran Aslam

Dr. Muhammad Dawood Husain

Dr. Saman Hina

Dr. Syed Salman Mobeen



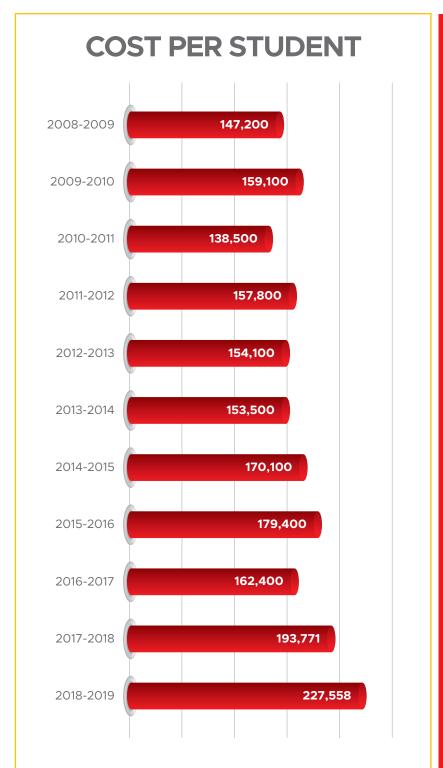
# UNIVERSITY FINANCES



# **DEVELOPMENT PROJECTS**

	SUMMARY OF ON-GOING DEVELOPMENT PROJECTS				
No.	NAME OF PROJECT	PC-1 Provision	Releases upto 15-05-2019	Amount utilized upto 15-05-2019	Expected date of Completion
01	Strengthening of NED University of Engineering and Technology (M-III)	2,193	2,193	2,124.648	Completed
02	Commencement of New Engineering Programs and Infrastructure Development at NED University	750.697	750.697	509.745	Jun-19
03	Development of Department of Food Engineering & Intrastructure (ADP Project)	327.343	45.000	NIL	Jun-20
04	Development of Sports Facility at NED University.	230	230	0.030	Jun-20

NED UNIVERSITY FUNDS				
S. NO.	NAME OF FUND	TOTAL IN MILLIONS PKR		
01	NED University Endowment Fund	1,012.181		
02	Most Endowment Fund	270.000		
03	Oman IT Chair Fund	193.000		
04	Rafeeqi Endowment Fund	5.000		
05	Pension Fund	1,273.884		
06	G.P. Fund	467.537		
07	Benevolent Fund	78.500		
08	Research Fund	246.193		
09	UDWP	212.386		
	TOTAL	3,758.681		



	NIE	FINAL DEMAND ESTIMATES (2018-19)	D ESTIMAT	ES (2018-19		ı
#S	PARTICULARS	RECURRING	SELF	UDWP	RESEARCH	CCEE
5	O1 Total Receipts	2,615.057	372.184	254.725	225.595	21.650
02	02 Total Payments	2,672.900	372.184	229.830	93.488	21.260
03	O3 Closing Balance	(57.843)	•	24.895	132.107	0.390
40	Payment Of Various Heads Likely To Be Deferred	59.130	ı	ı	1	ı
05	05 Net Closing Balance	1.287		24.895	132.107	0.390

KEY INDICATORS				
S. NO.	KEY RATIOS	2018-2019	2019-20 (PLANNED)	
а	Faculty : Staff Ratio	1:3.4	1:3.1	
b	Faculty : Student ratio	1:22	1:22	
С	Self-Generated Incom as % of total Resources	44%	46%	
d	Self-Generated Incom as % of total Expenditures	43%	42%	
е	Recurring Grant as % of Total Expenditures	43%	42%	
f	Students Fees as % of Cost per Student	35%	33%	
g	Salary as % of Total Expenditure	51%	52%	
h	Non-Salary as % of Total Expenditure	49%	48%	



#### **NED UNIVERSITY**

OF ENGINEERING AND TECHNOLOGY



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