



NATIONAL UNIVERSITY OF SCIENCES & TECHNOLOGY, PAKISTAN www.nust.edu.pk





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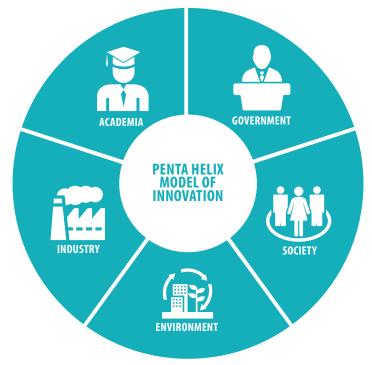
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KNOWLEDGE MANAGEMENT ECOSYSTEM

NUST strives to move beyond the conventional roles of knowledge dispensation to knowledge creation, and more importantly, knowledge transfer. Hence it is a third generation university with a growing focus on sustainability. NUST is responsive to technological change and is aware of industry and societal requirements, thus making a measurable contribution to national socioeconomic development.

More than 800 industry partners including SMEs, multinationals, large national firms, public sector and non-profit organisations, work with our constituent institutions on mutually beneficial initiatives, across various strands of University-Industry Linkages (UIL). Our partners gain access to the university's state-of-theart research infrastructure, world-class researchers, and brilliant young students, thereby creating value for the university and the stakeholders, and impacting the technological, social and economic progression of Pakistan.

The **Penta Helix Model of Innovation**, where Academia, Industry, Government, Society and Environment work together for development, is well demonstrated through the university's close interaction and collaboration with all internal and external stakeholders for institutional and national development.



AVENUES FOR PARTNERSHIP

DOMAIN	COLLABORATION AREAS
RESEARCH	 Joint research Joint publications and Conferences Joint product / solution development Joint patents
NATIONAL SCIENCE & TECHNOLOGY PARK	 Become a valued tenant by relocating your innovation centre Become a sponsor to "Innovate Pakistan" programme Become an investor in Angel Investment Network and Venture Capital (VC) Fund Become a mentor to budding startups
	 Integrating technology with industry Commercialisation of R&D Technology transfer advisory services Licensing and contracting
INCUBATION	 Facilities for entrepreneurs to kick-start their ventures and develop them into viable enterprises Business development support for startupss Opportunities for investment in incubation projects Services by startups companies in cutting-edge domains
PROFESSIONAL DEVELOPMENT	 HR development through corporate/executive trainings and professional diploma courses Customised training programmes suited to specific organisational needs Open enrollment workshops in IT, Engineering, Management and Healthcare
GRADUATE EMPLOYMENT	 Meeting employment needs of industry Connecting potential employees to industry Arranging industry talk series, recruitment drives and open houses
INDUSTRY-SPECIFIC R&D	 Industry solutions through application of research & development Curriculum development and enhancement based on industry needs Innovative solutions for spin-offs
POLICY ADVOCACY	 Collaboration opportunities for think tanks as well as policy and research centres across the world, for conducting joint research Policy advocacy and recommendations
COLLABORATE FOR SUSTAINABLE FUTURE	 Partnerships to enhance social impact of R&D being done by students & faculty Partnerships with CSR initiatives of public and private sector organisations as well as with donor organisations Scholarships and endowments - to support need-based scholars in pursuit of their dreams by donation against General Endowment, Restricted Endowment, Annual Fund and Zakat Fund Collaborate for SDGs Collaborate for climate action plan and other sustainabile solutions
OTHERS	 Partnership opportunities for sponsoring research projects, upgrading laboratories, developing infrastructure, etc Peacekeeping trainings for civil-military diplomacy among leading international & UN agencies and other associated organisations



MAJOR RESEARCH AREAS

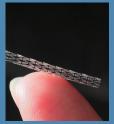
Aerodynamics Agriculture & Food Security AI & Machine Learning Automotive **Avionics Bio Energy Bio Medical** Biotechnology Chemicals **Control Systems CPEC Crime Prevention** Cryptography & Cyber Security Data Management **Disaster Management Economics** Education **Energy Management Energy Storage Engineering Management** Entrepreneurship **Environment & Climate Change** Finance **Fluid Dynamics Food Security** Geoinformatics Health Hospitality Human Resources Hydro Energy **ICs & Electronics** Image, Video & Signal Processing **Industrial Management**

Internet of Things Logistics & Supply Chain Management Manufacturing **Marine Sciences** Marketing Materials **Mathematics** Mechanics Metallurgy Minina **Modelling & Simulation** Nanotechnology **Networks & Network Security Neuro Sciences & Neuroinformatics Operations Management** Petroleum **Physics Polymers Power Electronics PV Technology RF, Microwave & Telecom Robotics** Social Sciences & Humanities Software Space Technology Thermal Energy Thermodynamics Transportation Urban Development Water & Sanitation Wind Energy

FROM R&D TO DEPLOYMENT

NUST assumes the role of intellectual powerhouse of Pakistan, generating intellectual properties and applied research-based projects that have outcomes for the industry with societal impact.





N-ovative Health Technologies (NHT)

- Groundbreaking initiative in Pakistan's medical devices industry
- Funded by Pakistan's Ministry of Science & Technology (MoST) and Planning Commission of Pakistan
- The country's first facility for production of certified cardiac stents & angioplasty balloon catheters



Wastewater Treatment Plant

- NUST meets water requirement for horticulture through its own wastewater treatment plant designed and developed by the university's researchers
- The plant uses wastewater generated from offices, hostels and residential colony

PAKISTAN'S FIRST UNIVERSITY TO TRANSFER TECHNOLOGY TO INDUSTRY

Few of NUST technologies/IPRs licensed to industry are:

1 IPR



ASAB

IOSAM ENGINEERING PVT LTI

ATTA-UR-RAHMAN SCHOOL OF APPLIED BIOSCIENCES



NUST recently signed a license agreement with Mosam Engineering Pvt. Ltd. to commercialize the TabCoal technology. TabCoal is an innovative coal tablet comprising of compressed coal with multiple additives with the aim of prolonging the burning time and reducing harmful gaseous emissions. In addition to the hospitality industry, TabCoal provides a better alternative to wood as a domestic fuel in areas where natural gas is not available.

GIS PLUS TOTAL SOLUTIONS SCEE

PNEC

SCHOOL OF CIVIL & ENVIRONMENTAL ENGINEERING



The proposed platform provides an automated society management system based on Geographical Information Systems (GIS), promising improved efficiency and peace of mind for both the management and customers alike. This technology is a key in the development of new housing and can also be integrated with existing housing societies to offer residents a highly advanced property management system.

3-PHASE LOAD BALANCER

PAKISTAN NAVY ENGINEERING COLLEGE

1 IPR



3PLB device is a power electronic device which optimises power consumption through uniform distribution of current in all three phases, hence eliminating the neutral current flow. The technology reduces electricity bills by up to 20%.

SANITIZE LIQUID BASED HAND SANITIZER

2 IPRS NUTRABIO MED SMC PVT. LTD.

BOLTS PVT LTD

COLLEGE OF ELECTRICAL & MECHANICAL ENGINEERING

NUST has launched SANITIZE; an Alcohol-Based Hand Sanitizer Liquid, developed according to the World Health Organisation (WHO) Guidelines 2020 that declare only high percentage alcohol-based disinfectants as effective protection against COVID-19. Developed by Dr. Nosheen Fatima and is licensed to Nutrabiomed SMC.

SMME



REAL-TIME HEALTH Monitoring of PMTS





$\xrightarrow{\text{KS}}$ | BOLTS PVT LTD

PAKISTAN NAVY ENGINEERING COLLEGE

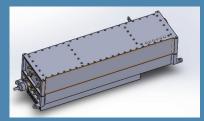
This system is able to reflect the health of transformers during its operation in real time as a component of smart grid, using intrusive and non-intrusive parameters, so that engineers can take proper preventive measures before minor issues become major faults.

S-BAND TRR MODULE FOR Phased-array radars

SEECS 11PR

ARRAYTECH

SCHOOL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE



A Transmit-Receive-Receive (TRR) module has been developed for phased array mono-pulse radar for ground based systems. This radar technique enables target detection with a single pulse, as opposed to conventional techniques of emitting multiple pulses in different directions and looking for maximum return. The project was a successful indigenisation effort for

potential use in air-traffic control and surveillance applications through academiaindustry partnership between NUST-RIMMS and RWR (Pvt.) Ltd.

PROJECT FOR AUTISTIC CHILDREN



SEECS 4 IPRS AWAAZ AI TECH

SCHOOL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE

This is an AI-based application which will provide interactive learning modules for Autistic Children ultimately creating an impact.

SINGLE DIAGNOSTIC KIT TO DETECT MULTIPLE VIRUSES

ASAB <u>3 IPRs</u>

VIROSCAN

ATTA-UR-RAHMAN SCHOOL OF APPLIED BIOSCIENCES





This kit detects viruses like HIV, HCV and HBV simultaneously. Simple, non-invasive, low cost paper strip would help in early diagnosis at home. The lateral flow assay used for the development of this diagnostic kit is based on six specialized parts of paper based strip: sample pad, conjugate pad, nitrocellulose, test line, control line and adsorbent pad. Of these regions the conjugate pad, test line and control line are of importance with respect to specificity of diagnosis. Once saliva is applied to the sample pad, capillary action leads it to conjugate pad, where it specifically binds and is detected via colour change.

AI AND DEEP MACHINE Learning for traffic Monitoring

CEME 11PR

NUST COLLEGE OF ELECTRICAL & MECHANICAL ENGINEERING CEME



The technology involves using state of the art computer vision AI and deep machine learning for traffic monitoring. The system can detect, count, and accurately classify multiple moving vehicles on the road from an overhead gantry, and estimate their speed, direction and dimensions in real-time. The technology has the potential to ensure safe, smooth, and efficient traffic flow while ensuring

the maintenance and sustainability of Pakistan's multi-lane highways carrying 80% of the country's commercial vehicular traffic.

CEME

7 IPHs

EKKO- A WAVE THERAPEUTIC Device

NUST COLLEGE OF ELECTRICAL & MECHANICAL ENGINEERING CEME



EKKO is a wave therapeutic device that uses ultra low frequency vibration waves to treat neurological disorders. EKKO has achieved international recognition for its innovative research and implementation in the areas of Cognitive Rehabilitation, Neurotransmission Cognitive Theory and Portable Design.

RISETECH PVT LTD

HESS CHART DIAGNOSTIC SYSTEM

CEME <u>4 IPRs</u>

RISETECH PVT LTD

COLLEGE OF ELECTRICAL & MECHANICAL ENGINEERING



Hess screening system is used to test eye squint, to identify eye muscles, which are responsible for squint and for measurement of paralytic strabismus. Strabismus is the state of the eye in which eyes are not properly aligned with each other and patients complain of double vision.

350+ labs 34 key lab<u>oratories</u>

Electromagnetic Compatibility & Interference Anechoic Chamber Neuro-informatics Robotics & Artficial Intelligence GPU-based Supercomputing Supersonic Wind Tunnel

> Pakistan's first national centres of excellence in Artificial Intelligence and Robotics & Automation

> > **20,000+** Journal & Conference publications

Research Funding in excess of PKR 7.5 Billion

Well established **Technology Transfer Office**, diffusing the university's innovation to local industry for societal impact

Manufacturing Resource Centre Design, prototyping & small-scale manufacturing of parts

1000+ IPRs filed and 200+ IPRs awarded

International academic linkages with 220 Institutions in 50 countries

School of Interdisciplinary Engineering & Sciences (SINES)

First-of-its-kind interdisciplinary research facility in Pakistan, which focuses on development of disruptive technologies

N-ovative Health Technologies (NHT) First facility in Pakistan for indigenous production of cardiac stents and angioplasty balloon catheters

US Pakistan Center for Advanced Studies in Energy (USPCAS-E)

Technology Innovation Support Centre of the World Intellectual Property Office (WIPO)

China Pakistan Technology Transfer Centre (CPTTC)

Pakistan's first international technology transfer avenue in collaboration with China International Technology Transfer Centre (CITTC)

National Science & Technology Park (NSTP)

Pakistan's first Science & Technology Park and the country's largest innovation ecosystem

Office of Sustainability (Nustainable)

First-of-its-kind office established in any Pakistani university as per international practices

Office of Sustainability

NUST established "Office of Sustainability" as per international practices, to pledge the organisation's commitment to sustainability and establish institutional platform for effective collaboration with national, regional, and international stakeholders on sustainability initiatives.

The mandate of Office of Sustainability is to adopt UN SDGs framework to align core functions of NUST i.e Academics and Students' engagement, Research and Innovation, Operations and Governance, and Stakeholders Management with the UN SDGs and global agenda 2030. This would be the first office of its kind in any university in Pakistan, approaching towards transforming NUST into SDG-engaged University. The office has also developed a one-of-its-kind portal to track, record and monitor 250 KPIs of SDGs framework, pertinent to the core functions of HEIs. The office engages internal and external stakeholders on a quarterly basis to report and set annual targets to improve on these KPIs.

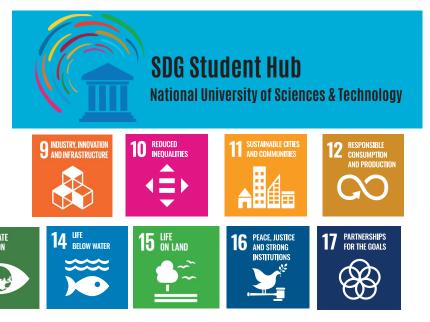
The office is open to establish cross-sectoral national and international partnerships to develop indigenous solutions, through interdisciplinary research and innovation, to address the impending challenges faced in achieving the SDGs, and simultaneously work on co-creating innovative technologies developed in-house, to ensure socio-economic impact of the research and innovation outcomes. The office is open to collaborate on development of a cross-sectoral Climate Action Plan for the university and local community, programs for youth engagement for sustainability, sustainable campus operations, research and innovation, inclusion, entrepreneurship and SDGs.



SDSN-SDG Student Hub

Sustainable Development Solutions Network (SDSN) is a global initiative by the United Nations focusing on engaging organisations in the 2030 SDG agenda. The main goal is to empower and equip them with the knowledge, tools, and skill sets to impact a positive change within the world. NUST has been an active member of SDSN since 2019 and is using the platform for wider dissemination of its initiatives in the wider global community through SDSN Mobilize platform with more than 4000 members.

The SDG Student Hub is an initiative of SDSN Youth that aims to engage students in higher education in the global effort to achieve the 2030 Agenda and the SDGs, as well as empower them with the knowledge, skills, and pathways to action to be effective agents of change today. The SDG Students Hub runs a global network to nurture effective lifelong advocates for sustainable development. It promotes integrated and localised approaches to achieve Sustainable Development Goals and provides opportunities to young minds to work for SDGs. The students directly work with SDSN on a global level along with many Student Hubs from across the globe.



NATIONAL SCIENCE & TECHNOLOGY PARK -NSTP convergence of nust knowledge ecosystem

NUST has proudly launched the country's first Science & Technology Park at its Islamabad campus. NSTP brings together industry and academia to create a national research and innovation ecosystem. NSTP houses techbased startups, hi-tech SMEs, innovation centres of large multinationals and corporations, and industrial and business innovation centres. NSTP provides the perfect launching pad for new ideas, products and businesses; adding value to the technological index of Pakistan, creating numerous job opportunities, and contributing to the knowledge economy, in addition to providing tax exumption on income tax and import duties.

Furthormore, NSTP is a hub for innovation and Intenational funds. We currently have firms from various countries, including Turkey, USA, UK, UAE, Japan, China, New Zealand, Switzerland, Netherland and Singapore

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N-ovative Health Technologies

N-ovative health technologies (NHT), a commercial arm of Medical Devices Development Center (MDDC), is instituted under special directives of the Prime Minister's Office and Supreme Court of Pakistan at NUST, Islamabad. NHT is dedicated to creating healthcare solutions that meet the immediate demand of the country. Sponsored by the Ministry of Sciences & Technology (MoST) with the mandate of indigenously manufacturing cost-effective high-quality medical devices. NHT facility is first-of-its-kind facility in Pakistan certified by European Commission Notifed Body and has obtained manufacturing license from Drug Regulatory Authority of Pakistan (DRAP).







TECH ONE Incubator

Established in 2005 as Pakistan's first universitybased technology incubation centre, TechOne provides a nurturing environment for technology-based startups to help them become commercially viable enterprises. Tech One also provides a platform for NUST faculty and students to establish their own technology-based business ventures.

SUCCESS STORIES

- Poulta: Agri Tech startup focusing on poultry sector; raised seed funding from notable Silicon Valley venture capitalist Tim Draper
- Turnotech: Global telecommunication technical consulting, services and outsourcing company that operates in 4 countries (Pakistan, USA, Australia and UAE)
- Tunacode: Accelerated computing startup that was acquired by a Saudi Arabian business group
- eMumba: A cutting-edge software technology firm led by Silicon Valley veterans that is now home to 150 world class engineers and designers, with more than 40 customers worldwide
- Cowlar: Accepted into Y Combinator, the world's no.1 accelerator based in Silicon Valley and raised \$1.4 million funding from celebrity investor Ashton Kutcher
- >> Wonderful Engineering: One of the world's top e-magazines for Engineering news, with 6 million Monthly Active Users

LearnOBots: Pioneers of STEAM education in Pakistan and creators of the world's first DIY software to solve scalability & teacher training problem in STEAM

TECHONE NOUBATOR

- > Orbit: Augmented reality based educational application that was selected in international accelerator programme Startupbootcamp in Amsterdam, Netherlands, and LearnLaunch in Boston, USA
- » APIMatic: One of the world's leading SaaS platforms aimed at the API economy with enterprise customers, such as Tripadvisor, Telstra, Expedia and others
- PackageX: Innovative package management solution with real estate giant WeWork as one of their global enterprise customers
- InventHub: Hardware design and collaboration platform that recently raised investment from a billionaire investor of Silicon Valley who was an early investor in Tesla, Baidu, Hotmail, Robinhood and many more

IP OFFICE

NUST established NUST Intellectual Property Office – the first IP office in Pakistani academia – at its Centre of Innovation & Entrepreneurship (CIE) in 2009.

e IPRS FILED: 1000+ AWARDED: 200+

he highest numbers by any Pakistani university

PROFESSIONAL DEVELOPMENT CENTRE - PDC The competitive edge you need!

Professional Development Centre (PDC) offers short courses, diplomas, and executive training to career-oriented individuals from a wide spectrum of industries. PDC has a rich pool of highly qualified trainers and industry experts, who design courses and customized programmes for various organizations.

PDC has so far conducted around 700 industry-focused workshops, trained more than 18,000 professionals from about 800 organizations. Currently, PDC is certified Professional Engineering Body of Pakistan Engineering Council (PEC) for carrying out continued professional development of PEC Registered and Professional Engineers. The Human Resource programs offered at PDC are all accredited from HRCI USA.

Amongst its clients are all blue-chip companies like Securities Exchange Commissions of Pakistan (SECP), National Logistics Cell (NLC), Election Commission of Pakistan (ECP), Pakistan US Embassy Alumni Network (PUAN), Telenor, Fauji Group of companies, Askari Bank Limited, Imarat Group of Companies, Techvalley Pakistan, Mari Petroleum, etc.

The core areas of trainings and diplomas offered by PDC include:

- » Management & Leadership Development
- » Accounting & Finance
- » Human Resource Management
- » Marketing and Sales
- » Corporate Governance
- » Information Technology

- » Data Analytics
- » Project Management
- » Engineering
- » Renewable Energy
- » Healthcare Management
- » Artificial Intelligence



NUST PLACEMENT OFFICE - NPO Ensuring graduate employement

The office builds and maintains linkages with local industry and international market to promote NUST graduates as the premium choice for employers. NPO arranges internships for students in first three years of their degrees in accordance with their demographic distribution, field of study and area of interest.

NUST Placement Office conducts NUST Career Fairs in major cities of Pakistan including Islamabad and Karachi to provide a rendezvous point for students to present themselves to their respective employers and enable the latter to address their human resource needs.

NPO also facilitates largest number of on-campus recruitment drives to ensure maximum placement opportunities for our students and graduates, and arranges several Industry and Alumni Career Talk to enlighten our students on specific industry insights, job market trends, employers' expectation and important tips on job application process. NPO also conducts NUST Internship programme for International Students (NIPIS) every year.



CORPORATE ADVISORY COUNCIL - CAC Bringing industry on board

- » Established in 2010, NUST CAC engages industry and business leaders from a wide range of sectors of the economy.
- » Each Sector Committee, headed by an Industry Co-Chair and a NUST Co-Chair, consists of 10-15 members representing large national organisations, multinationals, Small and Medium Term Enterprises(SMEs) and startups. The Committee members combine their leadership and experience, and work towards corporate-university liaison for research, resource generation, international collaborations and entrepreneurship.
- » Some of the domains of industry collaboration at CAC include: Industry outreach; establishing relationships and building trust; collaborative projects/ programmes/events, including Finding Innovative & Creative Solutions for Society (FICS); faculty placement in the industry etc.



CAC SECTORS

Banking & Financial Services	Healthcare & Lifesciences
Energy & Natural Resources	Real Estate & Infrastructure
Industrial Design & Architectural Engineering	Chemical, Materials & Natural Sciences
Textile & Leather	Foods, Beverages & FMCGs
Industrial Manufacturing & Production	Media, Communications & Digital Marketing
Technology, Artificial Intelligence & Robotics	Social Sciences, Law & Policy Studies

FINDING INNOVATIVE & CREATIVE SOLUTIONS FOR SOCIETY - FICS

MRI Coils SDG # 3

MRI is one of the most promising image modality to detect abnormalities in the human anatomy. Receive coil is an important component to acquire the MRI signal.

Rehabilitation SDG # 3

The object aims to provide a post-stroke rehabilitation system to let the survivors regain their body movement functions.

Intelligent Signals SDG # 11

Intelligent signal auto-adjusts timings of signal lights according to the flow of traffic and recognises number plate of vehicles, record and report road accidents to authorities in real time.

Data Trove SDG # 11

Data trove is a complete machine learning based security solution which protects against Scanning, DoS and web attacks in real-time by engaging the attacker using an efficient honeypot approc.

Olive Pitting SDG # 9

The translation of raw olives into dietary or medicinal used requires processing. Pit removal is a major constraint in processing. A semi; automomous machine is designed for effective pit extraction.

Uraan SDG # 8

A social entrepunership project to create awareness about work-study programmes, promote self-sustainable skill development, and empower social and financial stability in students.



NUST Institute of Policy Studies (NIPS) Nation-building policy advocacy

NUST is a key player in nation-building through human resource development, advancement of science & technology, promotion of entrepreneurship and innovation, and national policy formulation, to facilitate the creation of Knowledge Economy.

Launched on April 3, 2019, the NUST Institute of Policy Studies (NIPS) has been established to utilise the high policy formulation and advisory potential of the university, in line with the best practices of the top university-affiliated think tanks in the world.



RESEARCH AREAS

ECONOMY, GOVERNANCE & Socioeconomic Development IR, GEOPOLITICS | CPEC AND BELT & | WATER ENERGY & & SECURITY | ROAD INITIATIVE | ENVIRONMENT

POLICY FORMULATION FOR KNOWLEDGE ECONOMY & SCIENCE PARKS

Objectives

NIPS functions under the following core objectives: -

- » High-quality research and analysis in key domains of national, regional, and global significance
- » Policy intervention/advocacy in key domains of national development
- » Bridging the gap between knowledge production and policy formulation
- » Identification of projects for socioeconomic development having national impact
- » Promotion of academia-industry linkages



International Collaborations Lincoln Corner at NUST

NUST and the US Embassy in Pakistan have established a state-of-the-art Lincoln Corner at the university's Central Library. Lincoln Corners are event spaces and resource centres that connect young leaders with the US.

The Corner hosts online and in-person educational programmes. It includes a Maker Space equipped with a 3-D printer and virtual reality setup, a comprehensive book and magazine collection, resources on pursuing higher education in the US, digital information resources, and an Americana-themed event space.





NUST BRINGS GOOGLE TO PAKISTAN NUST Professional Development Centre (PDC) signed an agreement with TechValley – a Google partner. NUST students, industry leaders and professionals from diverse fields will benefit from Google Cloud trainings.





COLLABORATION WITH **220 UNIVERSITIES/** ORGANISATIONS FROM **50 COUNTRIES** NUST has understandings with many

International Universities across the World



Collaboration with Chinese institutions

NUST has forged meaningful partnerships with a number of Chinese universities, including Tsinghua University, Peking University, Xian Jiao Tong University, North China Electric Power University, Shenyang Aerospace University and Communication University of China, to name a few. Each year, a good number of students avail fully funded scholarships at different Chinese universities for MS and PhD programmes. NUST has become part of a number of university alliances/ networks of the region to reinforce efforts of regional HEIs by leveraging each other's strengths.

- » In January 2016, NUST established CPEC cell in its Chinese Studies Centre (CSC)
- » Beijing Forum-Islamabad was held at NUST in May 2016. The event was the first to be held outside of China and was jointly organised by NUST and the Peking University
- The first conference of the CPEC Consortium of Business Schools was hosted by NUST in August 2017
- » NUST & Beihang University have joined hands to establish BeiDou Belt & Road School at NUST
- » NUST & Chang'an University, China, are in discussion for initiating joint Civil Engineering degree programme

First-ever Pakistan's Japan Centre inaugurated at NUST

Pakistan's first-ever Pak-Japan Centre was simultaneously inaugurated by Rector NUST and Ambassador of Japan to Pakistan. The main aim of this building is to promote and enhance cooperation between Pakistan and Japan to develop an organisation in the region.

This will also make it easier for Japanese and Pakistani companies to inaugurate businesses in each other's countries through the connection of



their workers with each other's cultures, business concepts, and basic language skills. The organisations would not only be empowering students, staff, and researchers with newpaths for practical research in cutting-edge sectors, but would be beneficial for their building capability, according to the hopes and desires of the Japanese and Pakistani companies as well.

HEC - China Study Centre (CSC)

The Center for Chinese Studies aims to offer multidisciplinary research of Chinese society and to prepare skilled resource that can aid both countries in

bilateral national projects such as CPEC. The center offers language proficiency courses, workshops, seminars on UG, PG and PhD scholarship programmes and jobs in Chinese Multinational Companies. The centre works



to bridge gaps and enhance cooperation in education, culture and Information Technology sectors of both China and Pakistan.

Student & Faculty Exchange with Turkish Universities

The highest number of NUST student and faculty exchange agreements are with Turkish universities under the Turkish Governments Mevlana Exchange Programme. Tuition fee for NUST students is waived off by the host university in addition to provision of a stipend to cover living expenses. NUST's partnerships with Middle East Technical University, Akdeniz University, Inonu University, Yildiz University, etc., have yielded 50 student and faculty exchanges over the last four to five years.

NUST INTERNSHIP PROGRAMME FOR **INTERNATIONAL STUDENTS (NIPIS)**

In 2017, the university launched the NUST Internship Programme for International Students (NIPIS). The number of interns has risen in the past few years. During the 4-week internship, the international students work in different domains relevant to their fields of interest, besides participating in many co-curricular activities especially designed for them. The interns also visit different tourist attractions during the course of their stay at NUST.

INTERNSHIP FIFIDS

- » Physics
- » Transportation
- » Marketing
- » Computer Science
- » Chemistry
- » Engineering (all fields)
- » Economics
- » Architecture
- » Psychology
- » Business Administration
- » Accounting
- » Geographical Information Systems

Internship fields in National Science & Technology Park (NSTP) under 8 thematic areas:

- » Agri Tech
- » Auto Tech
- » Def Tech
- » Ed Tech
- » Energy Tech
- » Fin Tech
- » Health Tech
- » Smart Tech

- » Mathematics
- » Environment & Sustainability
- Biotechnology
- Human Resource Management

NIPIS

- 4-week duration »
- Supervision by subject experts »
- Hands-on experience in labs and » research facilities
- Visits to local industries and » tourist spots

Facilities



On-campus accommodation in secure environment



Meals & transportation facilities



Support for visa processing

Eligibility: International students

for more details www.npo.nust.edu.pk

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