

GET, SET COLLABORATE



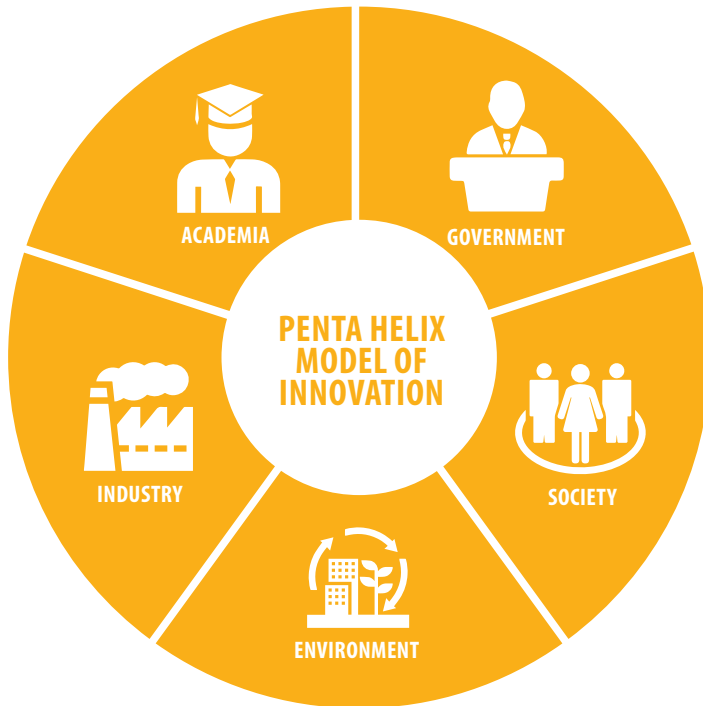
NATIONAL UNIVERSITY OF SCIENCES &
TECHNOLOGY, PAKISTAN
www.nust.edu.pk



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.

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.



NUST Research Themes (ALIGNED WITH UN SDGs) 60+ Research Areas



Smart Cities



Green Energy



Health & Well-Being, Food & Agriculture



Transformative Technology, Innovation & Shared Value Creation



Digital Futures



Pakistani Society, Business & Economy

AVENUE FOR PARTNERSHIPS

Joint research, publications and conferences
Joint product / solution development

400+ labs
34 key laboratories
Partnership opportunities for upgrading laboratories, developing infrastructure, etc

Indigenous R&D for industry solutions
Curriculum development based on industry needs
Innovative solutions for spin-offs

Technology transfer
Advisory services

Startup Incubation Ecosystem
Opportunities for investment in incubation projects

Become a valued tenant
Invest in Angel Investment Network and Venture Capital (VC) Fund

Partnerships to undertake CSR initiatives
Donation against General Endowment, Restricted Endowment, Annual Fund and Zakat Fund
Collaborate for Sustainable Development Goals (SDGs)

Corporate/executive trainings and professional diploma courses
Open enrollment workshops in IT, Engineering, Management and Healthcare

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

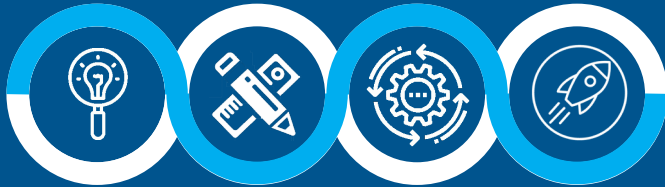
Policy advocacy and recommendations
Collaboration opportunities for think tanks, and policy and research centres

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

Meeting employment needs of industry
Connecting potential employees to industry

FROM LAB TO MARKET: DRIVING HOMEGROWN INDUSTRY SOLUTIONS

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.



Discovery Design Development Deployment

EKKO- A WAVE THERAPEUTIC DEVICE

7 IPRs →

RISETECH PVT LTD



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.

PROJECT FOR AUTISTIC CHILDREN

4 IPRs →

AWAAZ AI TECH



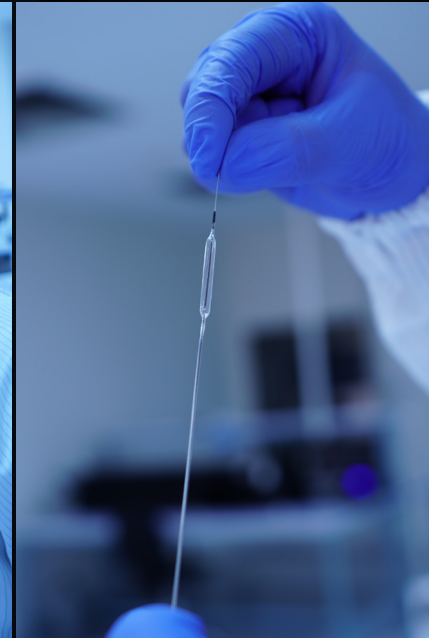
This is an AI-based application which provides interactive learning modules for Autistic Children ultimately creating an impact.

INNOVATIVE HEALTHCARE TECHNOLOGIES

ISO-13485 Certified Facility

1st Facility in Pakistan for Indigenous
Production of **Cardiac Stents** and **Angioplasty
Balloon Catheters**

Secured Manufacturing License from Drug
Regulatory Authority of Pakistan (DRAP) for
Mass Production



INNOVATE, DISRUPT, TRANSFORM

CENTRES OF EXCELLENCE

In 2018, the Government of Pakistan awarded 4 national centres of excellence to Pakistani academia in a competitive open bidding process. Based on a consortium model, 2 of these centres are based in NUST.

NATIONAL CENTRE OF ARTIFICIAL INTELLIGENCE

NCAI 9 labs in 6 universities across Pakistan



248

Research Publications



1037M+

Industrial & Research Funding Acquired



30+

AI Startup



40+

Trainings & Workshops



42

National & International Industry Collaborations

NATIONAL CENTRE OF ROBOTICS & AUTOMATION

NCRA 11 labs in 13 universities



260

Research Publications



530M+

Industrial & Research Funding Acquired



20

AI Startup



2000+

Students Trained



100+

New Products Developed

TECH ONE
INCUBATOR
Since 2005

Pakistan's largest
technology
incubation centre

SUCCESS STORIES

- » **Poulta:** Agri Tech startup focusing on poultry sector; raised seed funding from notable Silicon Valley venture capitalist Tim Draper
- » **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
- » **LearnOBots:** Pioneers of STEAM education in Pakistan and creators of the world's first DIY software to solve scalability & teacher training problem in STEAM
- » **Orbit:** Augmented reality based educational application that was selected in international accelerator programme Startupbootcamp in Amsterdam, Netherlands, and LearnLaunch in Boston, USA

WE DEAL IN SOLUTIONS

MANUFACTURING RESOURCE CENTER (MRC)

Established in NUST School of Mechanical & Manufacturing Engineering

Annual training of over 500 students for their workshop technology courses

Manufacturing of parts and products

Catering to manufacturing requirements of industry

Conduct of vocational trainings

SEEING IS BELIEVING. WE HAVE A DIVERSE POOL OF OFFERINGS, EXPERTISE AND INFRASTRUCTURE THAT MAY SERVE OUR SHARED ASPIRATIONS. JOIN US TO MAKE MIRACLES HAPPEN!

PROFESSIONAL DEVELOPMENT CENTER-PDC

The competitive edge you need!

NUST Professional Development Centre conducted around **700** industry-focused workshops, trained more than **18,000** professionals from about **800** organisations.

Core areas of trainings and diplomas:

- » 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



EXCELLENCE DEFINED - OUR GRADUATES, YOUR BEST CHOICE

By virtue of being intellectually sound, professionally thorough and socially responsible individuals, NUST graduates remain the first choice of leading employers from around the world. NUST Placement Office (NPO) builds and maintains linkages with local industry and international market to connect NUST graduates with them. NPO regularly

- » arranges internships for students in first three years of their degrees
- » conducts NUST Career Fairs in major cities of Pakistan including Islamabad and Karachi

» holds Industry and Alumni Career Talks on industry insights, job market trends, etc.



BRINGING INDUSTRY ON BOARD, LET'S MAKE IMPACT TOGETHER!

» Offices of Research, Innovation & Commercialisation (ORIC) at NUST serve as a central point for all research and innovation churning out of the university. They play an instrumental role in connecting the academia with corresponding industry and business leaders.

AREAS OF COLLABORATION

1 Joint R&D	4 Tech Transfer & Commercialisation
2 Innovation & Entrepreneurship	5 Sustainability Initiatives
3 Trainings & Workshops	6 Faculty Placement in the Industry



INTERNATIONAL COLLABORATIONS



247 Universities/
Organisations
52 Countries

Lincoln Corner at NUST

One of the latest outcomes of these collaborative partnerships is the establishment of a state-of-the-art Lincoln Corner at the university's Central Library. The US Embassy in Pakistan and NUST have jointly established this facility. Lincoln Corners are event spaces and resource centres that connect young leaders with the US.



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