

NATIONAL UNIVERSITY OF SCIENCES & TECHNOLOGY (NUST), PAKISTAN

Islamabad | Rawalpindi | Karachi | Risalpur | Quetta





Institutions

Academic Programs







SDG Aligned

Innovation Focused

Collaboration Driven



#41
Top 50
Young
Universities

#94
Employer
Reputation

#160 in Engineering

#140
In Electrical & Electronic Engg

#148
In Comp Sc & Information sys

TIMES HIGHER EDUCATION **IMPACT RANKING 2023**



Among Top 300 in the World



101-200 in the World

SDG-7 (Affordable & Clean Energy)



201-300 in the World

SDG-9 (Industry, Innovation & Infrastructure)



101-200 in the World

SDG-12 (Responsible Consumption & Production)



MULTIDISCIPLINARY STRENGTH



Engineering

Information Technology

Applied Biosciences

Basic/Natural Sciences

Social Sciences & Humanities

Art, Design & Architecture

Management and Leadership Studies

Peace and Conflict Studies

Military Art and Science

NUST School of Health Sciences





4 NATIONAL CENTRES OF EXCELLENCE IN DISRUPTIVE TECHNOLOGIES

FOR
ARTIFICIAL
INTELLIGENCE

FOR
ROBOTICS &
AUTOMATION

KEY LABS - NATIONAL
CENTRE FOR
BIG DATA &
CLOUD COMPUTING

KEY LABS - NATIONAL
CENTRE FOR
CYBER
SECURITY

NUST INTELLECTUAL PROPERTY RIGHTS & TECHTRANSFER ECOSYSTEM



Intellectual Property Life-Cycle Management Ecosystem

Lead WIPO Partner in the region for promotion of IP Policies

FILED IPs: | 00+

AWARDED IPs: 208

Including international IPRs:

- √ 7 US
- ✓ I Korean
- ✓ I Patent Cooperation Treaty (PCT)

PAKISTANI UNIVERSITY

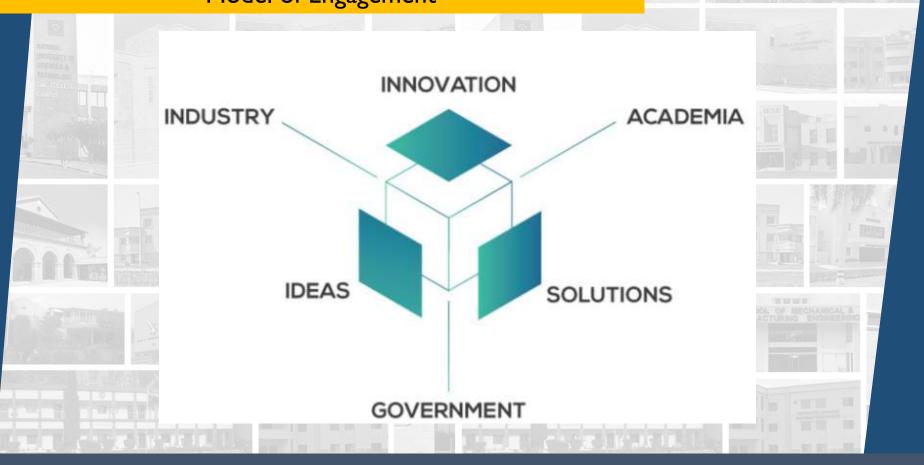
TO TRANSFER
TECHNOLOGY
TO INDUSTRY



COLLABORATION FRAMEWORK

Fourth Generation Triple-Helix - III

Model of Engagement





PAKISTAN'S 1st INTERDISCIPLINARY RESEARCH CLUSTER

School of Interdisciplinary Engineering & Sciences

31 Hi-Tech Labs under One Roof

12 International Industrial Labs







SCME









NATIONAL SCIENCE & TECHNOLOGY PARK

Pakistan's First Science and Technology Park





- 114 Hi-tech companies on board
 - ◆ 54 Anchor tenants and SMEs
 - 63 Startups
 - 25 MNCs from 11 Countries

8 Thematic Sectors

High-tech Special Economic Zone (SEZ)

58 Acres of Land for Expansion

Recent Investments by International VCs



Peter Thiel backs
PriceOye

\$7.9M

PriceOye is Pakistan's largest e-commerce electronic marketplace that has raised funding from Peter Theil who was the co-founder of PayPal.



Adam Draper invests in Orbit - Ed

\$500,000

Orbit-Ed - a female-led startup working in the Ed-tech vertical that provides AR/VR training to corporates, has raised funding from Boost VC.

VECTARA wins \$20M in seed funding

Largest funding raised by NSTP Tenant

The company uses the latest innovations in artificial intelligence and neural network technologies for natural language processing to deliver unparalleled search relevance and uncovers the Intent of the user search.

Minorities & Women Startups



National Science & Technology Park has also won

\$250,000 funding from US Embassy for

Training/Funding of Minorities & Women Startups

Hi-Tech Labs.









JAZZ 5G INNOVATION LAB

ARCELIK GLOBAL

TURKISH AEROSPACE

TUFAIL GROUP

NUST TEAM



- Ms Sana Maqbool
- M.Phil. (Anthropology)
- Director ICON



- Mr Mohammad Ali Khan
- MBA (HR)
- General Manager NUST Professional Development Centre
- Global Certification Expert with Human Certification Institute- USA
- MBTI & Global Certified HR Professional
- Certified Neurolinguistic Professional- American Board of NLP
- Behavior Trainer, Employability Coach

NUST TEAM



- Dr Mohsin Tiwana
- PhD (Biomedical Engineering)
- Professor
- Dept of Mechatronics (CEME)
- President Gold Medal For Innovation and Commercialization
- Winner Prime Minister Discover Challenge



- Dr Riaz Ahmed Mufti
- PhD(Mechanical Engineering)
- Professor
- A Chartered Mechanical Engineer and a Consultant
- School of Mechanical & Manufacturing Engineering (SMME)
- Presidents' Pride of Performance, Government of Pakistan



- Dr Inayat Ullah
- PhD (Public Policy and Management)
- Asst Professor
- School of Social Sciences & Humanities (S3H)
- Innovative Policy Best Paper Award from the Asian Development Bank (ADB)

NUST- EKKO wins Better World Project 2023 Internationally

EKKO is a portable device that uses vibrational waves to treat neurological disorders based on **Neurotransmission Cognitive Theory**

2 Types

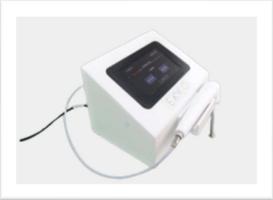
- EKKO Portable
- 2. EKKO Clinical

Successfully commercialized to RISETECH, 75+ Families used, more than 5500 therapeutic sessions done

Success: 100%

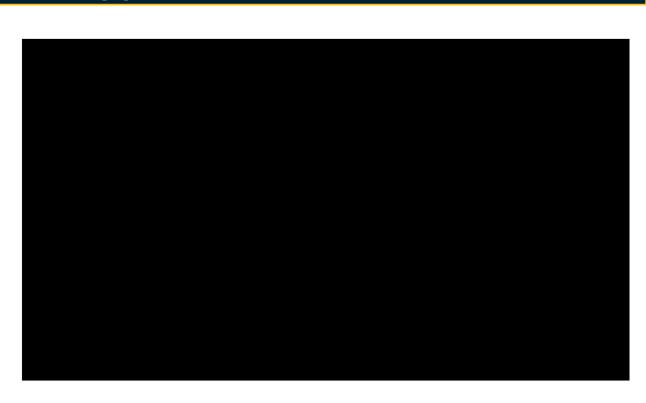
Better World Project Award Winner, AUTM





MyoBionics Prosthetic Gripper

- Lightweight and fully functional
- Can hold a circular object
- Soft finger pad
- User-friendly experience
- Natural skin appearance



Semi-Automation of Prosthetic Knee

Digital Otoscope



Design and control a mechanism for the pneumatic knee joint, help the amputees assist in autoadjustment of damping for movement of various ADLs i.e., walking, jogging, stairup, stair-down.



A simple and fundamental tool for medical practitioners designed for visual examination of internal ear structure, typically having a light and a set of lenses.

Customize Orthotic Insole

- Relieves chronic pain caused by plantar fasciitis.
- Correction of foot and leg pronation angles in flatfooted people.
- Provides stability for high arch foot profiles.
- Treatment for leg length discrepancy.

Land Rover Defender Jeep Test Bench

Unmanned Ground Vehicles







Land Rover Defender Jeep Test Bench is a Test Bench for our On-Board Diagnostics (OBD), specifically designed for Defender Jeep, is currently and operational at 501 EME Workshop to diagnostic give for the reports vehicle.









Unmanned Ground Vehicles are configurable for various applications and can be tele-operated from a distance of I km.





NUST Expertise and Contributions-Industry-Related Policy-Making Process

Project Solar Energy Policy Reform

Industry Tara Climate Ltd

Project National Tariff Policy:

Dr. Zafar Mehmood- a member of the National Tariff Commission, influencing key

policy decisions.

Project Tax Rationalization and Policy Recommendations:

Proactive engagement in recommending policy changes to alleviate tax burdens on

industries.

Project Estimating the Quantum of Illicit Trade in Pakistan

The Case of Tobacco Sector Calculated the tax evasion, evaluated the financial impact of FED policy change, identified the key challenges, and suggested policy

advice to the government

NUST Expertise and Contributions-Industry-Related Policy-Making Process

Project Tech-Based Monitoring Project:

To enhance the effectiveness of technology penetration into the government public administration and proactive engagement in recommending policy changes to alleviate tax burdens on industries.

Project Sales Projections for Angro-Polymers

Industry Angro-Polymers and Chemicals Ltd

Project Improving quality of education SDGs

Industry Google and ministry of education

Project Electric Motorcycle Feasibility Study,

Sustainable Economic Policy Initiative (HEC)
Health Cost of Newborn Diseases in Karachi (HEC)

PROFESSIONAL DEVELOPMENT & TRAININGS CENTER

Our Numbers Speak

Participants Trained 100,000+

Training Hours 400,000+



Workshops 5,000+

Corporate Partners 400+

WHAT WE OFFER



I. Training

I. INDUSTRY FOCUSED WORKSHOP



ManagementConsultancy

CUSTOMISED TRAININGS



3. Assessment Services

1.3 INTERNATIONAL CERTIFICATIONS

INDUSTRY FOCUSED- OPEN ENROLLMENT

Continuous Learning and Growth - Open Enrollments - Professional Development Programs









I.2. CUSTOMIZED TRAININGS

Customization Process

Discovery

- a. Diagnostic
- b. Data review
- c. Success criteria
- d. Design and co-creation
- e. Learning approach
- f. Timeliness
- g. Assessment criteria
- h. Impact assessment
- i. Organisational Level Analysis
- j. Task Analysis
- k. Personnel Analysis

Training Implementation Plan

- a. Provide Supporting Material
- b. Conduct Training

Follow Up

- Long-Term Business Impact
- b. Performance
 Measurement
- Continuous Improvement

Design Customised Training Plan

- a. Develop objectives
- Establish Training
 Outlines
- Develop Training Plan and Strategies

Development of Course Development

- Match best practices with client needs
- b. Prepare training support materials
- c. Tools and Kits

Learning Evaluation

- a. Post Training Assessment
- b. Review effectiveness

Learning Methods and Modes

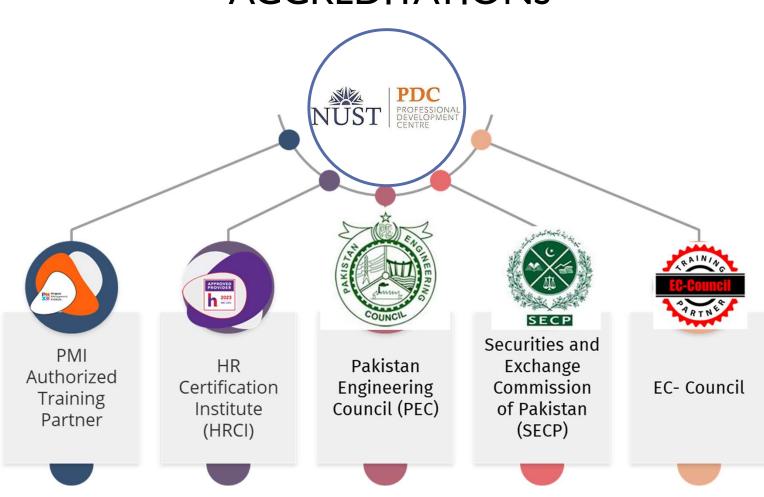
- a. Face-to-face
- b. Action learning sets
- c. Asynchronous VLE
- d. Business simulations
- e. Role play
- f. Focus group

At PDC, our customized training programs are designed to address specific organizational needs and goals.

Why Choose NUST PDC for Customized Training?



I.3. GLOBAL AND NATIONAL ACCREDITATIONS



2. MANAGEMENT CONSULTANCY

- Collaborative Innovation
- Opportunity Exploration
- Use In-house Expertise
- Critical Issue Management
- Impactful Solutions







3. ASSESSMENT



Hogan Assessments & Behavioral Interviews







Our services include a complete range of licensed psychological assessments including Hogan, Saville, EQ,TRAIT, MBTI, SOSIE, GIOTTO, BIG-FIVE, Derailment, LSQ, CII,TDI which over employee development, selection as well as leadership assessments.

TRAINED AND CERTIFIED FROM

















The Process

Assessment Administration (remote or at premises)

20-25 minutes for each of the three assessments

Bespoke Report Compilation

The brief and powerful report summarizes the 3 reports as well as the candidate performance during the interview into **one report** prompt decision making

Presentation of the results to the top management

Detailed trend analysis and recommendations to the top management.



Online assessment

Set up of access for all the participants

Behavioral Interviews

45 minutes interview with each candidate.

Submission of Reports

Psychometric and bespoke reports of all the candidates to be submitted

INDUSTRY-ACADEMIA PARTNERSHIPS



Professional Development Centre (PDC) National University of Sciences and Technology (NUST)



Touchstone Communications



Professional Development Centre (PDC)
National University of Sciences and Technology (NUST)



State Bank NIBAF



Professional Development Centre (PDC)
National University of Sciences and Technology (NUST)



AtomCamp



Professional Development Centre (PDC)
National University of Sciences and Technology (NUST)



Rawalpindi Chamber of Commerce



Professional Development Centre (PDC)
National University of Sciences and Technology (NUST)



Mobilink Microfinance Bank



Professional Development Centre (PDC) National University of Sciences and Technology (NUST)



IARS



Professional Development Centre (PDC)
National University of Sciences and Technology (NUST)



ICAP



TLT



Professional Development Centre (PDC)
National University of Sciences and Technology (NUST)



Kohinoor Textile Mills

