



# NUST's Role in Building Nation's Resilience against Disasters



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**UN-SPIDER**

**INTERNATIONAL CONFERENCE**

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**National University of Sciences & Technology**

# Sequence

**Background**

**Introduction**

**Importance of the course**

**Educational objectives**

**Awareness**

**Way Forward**

When planning for a year,  
plant crop.

When planning for a decade,  
plant trees.

When planning for life, train  
and *educate* people.



**NATIONAL UNIVERSITY OF SCIENCES AND TECHNOLOGY  
(NUST)**

# HISTORICAL PERSPECTIVE

- **Established** **1991**
- **Awarded Charter** **1993**





## **Chancellor**

- **Prime Minister**

## **Chief Executive**

- **Rector**

## **Parent Ministry**

- **Ministry of Science & Technology**



# MISSION

To Develop NUST as a  
**Comprehensive, Research-led**  
University with a focus on  
**Technology,**  
**Innovation** and **Entrepreneurship**



# UNIVERSITY RANKINGS

## WORLD RANKING

- **Top 500 (417<sup>th</sup>) Universities of the World**
- **Engg & IT: Top 250 Universities of the World**

## ASIAN RANKING

- **Overall 108<sup>th</sup> University of Asia**
- **Engineering & IT: 53<sup>rd</sup>**
- **Life Sciences & Medicine: 87<sup>th</sup>**

Source: QS World and Asian Rankings



# ABOUT NUST

- **Constituent Institutions : 18**
- **Programs:**
  - **UG : 27**
  - **PG : 34**
- **Fields:**
  - **Engineering**
  - **IT**
  - **Medical & Bio Sciences**
  - **Management Sciences**
  - **Basic Sciences**
  - **Social Sciences**
  - **Art, Design & Architecture**





# STUDENT POPULATION

Category	Strength
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UG	8,846
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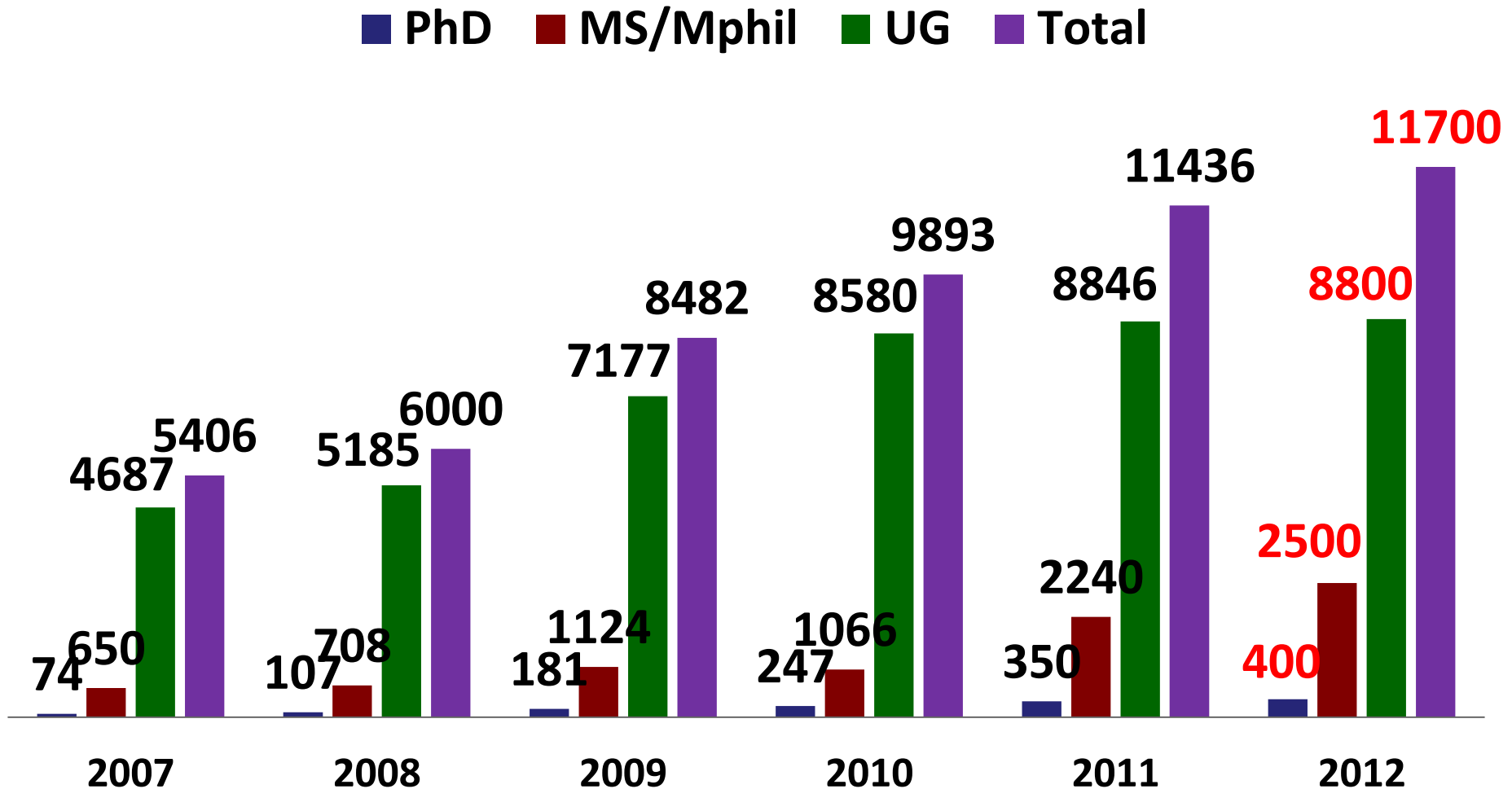
MS/MPhil	2,240
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PhD	350
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Total	11,436
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# PROGRESSIVE INCREASE IN TOTAL STUDENT STRENGTH

Increase: More than Double



# FACULTY STRENGTH

- **PhD + Fellowships** - **377 (45.8%)**
- **MS/MSc + MPhil + Memberships** - **446**
- **Total** - **823**

# CIVIL ENGG COLLEGE & SCHOOL

- **Military College of Engineering (MCE) Risalpur**
  - **PG Programs in:**
    - **Disaster Management**
    - **Disaster Mitigation & Reconstruction Engg (DM&RE)**
    - **Construction Engg & Management**
  - **UG Program in Civil Engg since 1952**
- **School of Civil and Environmental Engg (SCEE), Islamabad**
  - **NUST Institute of Geo Informatics System (IGIS)**
  - **NUST Institute of Environmental Sciences & Engg (IESE)**
  - **NUST Institute of Civil Engg (NICE)**
  - **National Institute of Transportation (NIT)**

# Background

- Disasters have always been occurring throughout the history of mankind but the frequency of their occurrence in last two decades has forced the world to plan effective disaster mitigation and management to reduce the risks associated with these.
- Pakistan has experienced major disasters with intense frequency during last decade.
- Pakistan started working on formulation of its national disaster management policy after Kashmir Earthquake of 2005.



- Establishment of National Disaster Management Authority (NDMA) and its subsidiary organizations at provincial and district level have brought the paradigm shift from relief oriented approach to prevention, mitigation, and preparedness, commonly referred as disaster risk management (DRM).
- This approach is being further refined by mainstreaming the disaster risk reduction (DRR).

# Introduction

Although Pakistan has started institutionalized training and education at national level by establishing disaster management centers but no formal MS program in Disaster Management could be launched by any of the institution of the country till 2012.

- NUST a leading university of the country took initiative and launched vertically tiered Post Graduate (PG) programs in Disaster Management in MCE (a constituent college of NUST located at Risalpur) from August 2012.
- NUST has recently signed a MoU with AIT Thailand for collaboration in Disaster Management which will help in making the program more useful and acceptable at international level.

Admission of **23** students as pioneers and now strength of **40** students with variety of backgrounds ranging from engineering to business administration and basic/social sciences in the first year shows the popularity and success of newly launched programs.

## Importance of the course

The Disaster Management MS degree is designed to equip with the skills needed to practice emergency planning, disaster preparedness and manage the response to social, technological and natural disasters. Specifically, it aims to blend practical work experience with the theoretical aspects underpinning development studies.

## Our Strengths

- Military College of Engineering (MCE) has always played a major role in Disaster Management and Rehabilitation of civil infrastructure damaged by disasters such as earthquakes and floods
- PhD qualified faculty from the World's renowned universities in variety of disciplines (e.g., Earthquake Engineering, Structural Engineering, Geotechnical Engineering, Transportation Engineering, Water Resources etc.
- Collaboration and linkages with AIT Thailand for Disaster Management and Mitigation.



## Educational Objectives

- To develop general understanding of disasters, disaster management, disaster mitigation and reconstruction engineering.
- To enable graduates to make disaster risk assessment and mitigation by using various engineering tools.
- To develop the understanding of seismic, floods, and landslides hazards and design structures to mitigate the effects of these disasters.
- To make the graduates capable to retrofit existing civil infrastructure to enhance its performance against disasters.
- To conduct research in disaster management to suggest effective and economical design practices and develop standards and bye-laws for various structures in the earthquake and floods prone areas.

# WAY FORWARD

1. Conducted ONE DAY National Workshop on Disaster Management in May 2013.
2. Planning TWO DAYs International Conference in NUST Islamabad in 2014 Second Half.
3. Inviting international experts for lectures on DRM at NUST and MCE Risalpur Campus.
4. Looking for the opportunities of PhD for our MS Students.



National University of Sciences & Technology

**THANK YOU**



MILITARY COLLEGE OF ENGINEERING  
RISALPUR, PAKISTAN

