

# FIRST INDUSTRY ADVISORY BOARD MEETING

DEPARTMENT OF CIVIL AND  
ENVIRONMENTAL ENGINEERING  
NORTH SOUTH UNIVERSITY

PROFESSOR MOHAMMAD NAZMUL ISLAM, CHAIR OF THE DEPARTMENT  
ROOM NO 746, SOUTH ACADEMIC BUILDING, NSU CAMPUS, BASHUNDHARA, DHAKA

# OUTLINE

- VISION AND MISSION
- ACADEMIC PROGRAMS
- STUDENTS
- FACULTIES
- LABORATORIES
- RESEARCH

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# VISION

DCEE at NSU **aspires to be a leader** in providing **engineering solution** to infrastructure development in a sustainable manner in line with the national and global context. In line with this, it will gain recognition, nationally and globally, and will attract students, faculty and staff accordingly, and **collaborate with industries** and other stakeholders.

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# MISSION

The mission of CEED at NSU is to **produce world-class engineering graduates** with proficient in technical competency, ethical standard and leadership skill, who can have a successful career in civil and environmental engineering as a professional and/or contribute to advancement in knowledge and innovation in the field.

Specifically it will concentrate on:

- Imparting adequate **technical skill** to students with up-to-date global knowledge base;
- Ensuring that the students have the skill of **critical thinking** and analytical skill;
- Educating with **social awareness, ethical** and sustainability commitment, and leadership skill;
- Contributing to research, innovation and maintaining an **effective industry-academia relation**; and
- Standardizing skill sets and education methods with national and international scale.

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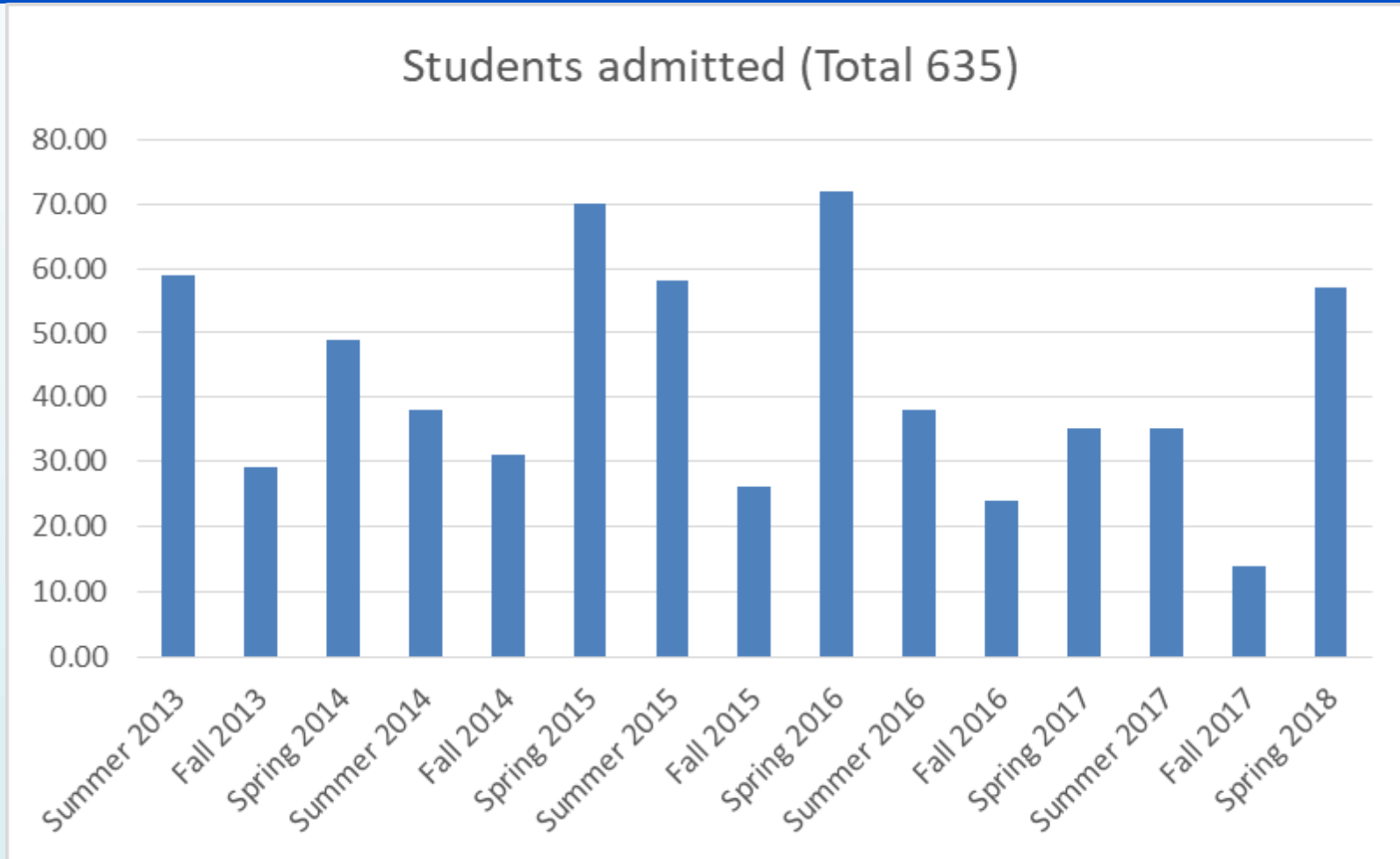
# ACADEMIC PROGRAMS

- B.S. IN CIVIL AND ENVIRONMENTAL ENGINEERING (approved by UGC in 2004)
- BS IN CIVIL AND ENVIRONMENTAL ENGINEERING (under approval process in UGC)
- MS IN CIVIL AND ENVIRONMENTAL ENGINEERING (curriculum committee)

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# STUDENTS



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# STUDENTS

- National curriculum – HSC
- International curriculum – A level
- Expatriates - mostly from Arab countries
- Foreign students – Somalia, Bhutan

Total current students = 484

Ratio male/female = 4: 1 (approximately)

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# FACULTIES

## **Dr. Md. Sirajul Islam**

### **Professor, Water Resources**

Ph.D. in Environmental Engineering, University of Tokyo, Japan

M Engg. In Civil Engineering, National University of Singapore (NUS), Singapore

B.Sc. in Civil Engineering, BUET, Dhaka

## **Dr. Javed Bari**

### **Professor, Transportation Engineering**

PhD, in Civil Engineering, Arizona State University, USA

MS, in Civil Engineering, Arizona State University, USA

M.Engg. in Environmental Engineering, BUET, Dhaka

B.Sc. in Civil Engineering, BUET, Dhaka

Professional Engineer (PE), USA

## **Brigadier General (rtd) Dr. Habibur Rahman Kamal, ndc, psc**

### **Professor, Structural Engineering**

PhD, Preston University, California, USA

MS, Naval Post Graduate School, USA

M Sc in Civil Engineering, Bangladesh University of Engineering and Technology(BUET)

Masters of Science in Development Studies, Bangladesh University of Professionals (BUP)

B.Sc. in Civil Engineering, Chittagong University of Engineering and Technology

## **Dr. Mohammad Nazmul Islam**

### **Professor & Chair, Structural Engineering**

PhD. in Civil Engineering, The University of Tokyo, Japan

MSc.Engg. in Civil Engineering, National University of Singapore (NUS), Singapore

BSc. in Civil Engineering, BUET, Dhaka

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# FACULTIES

## **Dr. Nazmun Nahar**

### **Associate Professor, Water Resources Engineering**

PhD in Civil Engineering, Purdue University, USA  
MSc in Civil Engineering, Purdue University, USA  
BSc. in Civil Engineering, BUET, Dhaka  
Professional Engineer (PEng), Canada

## **Dr. Nadim Reza Khandaker**

### **Associate Professor, Environmental Engineering**

PhD in Environmental Engineering, Pennsylvania State University, USA  
MSc in Environmental Engineering, University of Arkansas, USA  
BSE in Chemical Engineering, University of Massachusetts at Lowell, USA  
Professional Engineer (PEng), Canada

## **Dr. Md. Shoaib Chowdhury**

### **Associate Professor, Transportation Engineering**

PhD, in Transportation, New Jersey Institute of Technology, USA  
M.E. in Civil Engineering, City College of New York (CCNY), USA  
BSc. in Civil Engineering, BUET, Dhaka  
Professional Engineer (PE), USA

## **Dr. Shama E. Haque**

### **Assistant Professor, Environmental Engineering**

Ph.D. in Environmental Engineering (Geochemistry), University of Texas at Arlington, USA  
B.Sc. in Civil Engineering, University of Texas at Austin, USA

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# FACULTIES

## **Dr. Fahmidah Ummul Ashraf**

### **Assistant Professor. Water Resources**

Ph.D. in Civil Engineering, Pennsylvania State University, PA., USA, 2015

M.Sc. in Civil and Environmental Engineering, University of Texas at San Antonio (UTSA), TX., USA, 2013

B.Sc. in Water Resource Engineering, BUET, Bangladesh, 2009

## **Ms. Sifat Kalam**

### **Lecturer, Environmental Engineering**

M.A.Sc. in Civil Engineering (Environmental Engg.), University of British Columbia (UBC), Canada

B.Sc. in Civil Engineering, BUET, Dhaka

## **Fokruddin Ahmad**

### **Lecturer, Structural Engineering**

M.Sc. in Civil Engineering, University of North Dakota, USA

B.Sc. in Civil Engineering, BUET, Dhaka

## **Md. Tousif Rahman**

### **Lecturer, Geotechnical Engineering**

MSc. In Geotechnical Engineering, University of Newcastle Upon Tyne, UK

B.Sc. in Civil Engineering, Cardiff University, UK

## **S.M. Ashfaquul Hoq**

### **Senior Lecturer , Structural Engineering**

Ph.D. (ongoing), University of Wyoming, USA

MSc in Civil Engineering, The university of Texas at Arlington (UTA), TX, USA

B.Sc. in Civil Engineering, BUET, Dhaka

## **Ms. Nawrin Anwar**

### **Lecturer, , Environmental Engineering**

Ph.D. (ongoing), Concordia University, Montreal, Canada

M.E.Sc. in Civil and Environmental Engineering (Environmental Engineering), University of Western Ontario, Canada

B.Sc. in Civil Engineering, BUET, Dhaka

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# FACULTIES

- Structural engineering: Two Professors and one lecturer
- Transportation Engineering: One Professor and One Associate Professor
- Water Resources Engineering: One Professor, One Associate Professor and One Assistant Professor
- Environmental Engineering: One Associate Professor One Assistant Professor and One lecturer
- Geotechnical Engineering: One Lecturer

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# PART TIME FACULTIES

**Dr. Asif Mohammad Zaman**

**Managing Director, Esolve International & Associate Professor**

Ph.D. in Water Resources Management, University of Melbourne, Australia

M.Eng. in Environmental & Earth Resource Engineering, Imperial College London, UK

**Dr. Shoeb Reaz Alam**

**Additional Deputy Inspector General Bangladesh Police & Assistant Professor**

Ph. D. in Civil Engineering, Lamar University, Texas, USA

M.Sc.in Civil Engineering, Lamar University, Texas, USA

B.Sc. in Civil Engineering, BUET, Dhaka

**David M Khan**

**Senior Specialist, Institute of Water Modeling, Dhaka &**

**Senior Lecturer**

EMBA, Institute of Business Administration (IBA), Dhaka

M.Sc. Texas A & M University (TAMU), USA

B.Sc. in Civil Engineering, BUET, Dhaka

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# STRUCTURAL ENGINEERING LABORATORY



Universal Testing Machine (UTM)



Extensometer



Digital Load Calibration Device



Bending Test Attachment



Beam Testing Apparatus

# STRUCTURAL ENGINEERING LABORATORY



Rockwell Hardness Tester



Pendulum Impact Tester



Slender Column Testing Machine



Iron Cutting Tools

# ENGINEERING MATERIALS LABORATORY



Dual Frame Compression Machine



Digital Load Calibration Cell



Vicat Apparatus



Blaine Apparatus with Accessories



Slump Cone with Base Plate

# ENGINEERING MATERIALS LABORATORY



Crack Detection Microscope



Los Angeles Abrasion Machine



Motorized Sieve Shaker and Standard Sieves



Concrete NDT Testing Schmidt Hammer



Buoyancy Balance



Core Cutting Machine (Petrol Engine Driven)



# TRANSPORTATION ENGINEERING LABORATORY



Cleveland Flash and Fire Point Tester



Rotational Viscosity (Brookfield)



Ring and Ball Apparatus



Magnetic Stirrer/ Hotplate



Penetration for Asphalt



Motorized Marshall Test Apparatus



# TRANSPORTATION ENGINEERING LABORATORY

CE



Motorized Sieve Shaker



Rice Density Tester



Digital Thermometer



Needle Probe 3mm x 100mm



Particle Size & water absorption measuring equipment



Aggregate Impact Value tester



Vacuum Air Extractor



Standard Flakiness Index set of 7 Sieve

# HYDRAULICS LABORATORY



10 m / 30 ft Tilting Flume



Rain Gauge

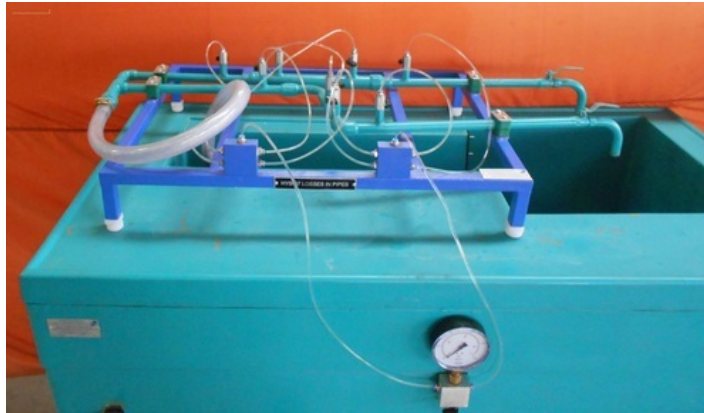
Hydrologic system bed – to test hydrological cycle components



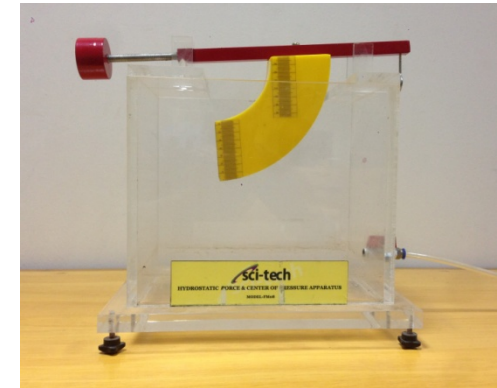
# HYDRAULICS LABORATORY



Bernoulli's Apparatus



Fluid friction Apparatus



Center of Pressure



Hydraulic Bench



Venturimeter



Point Gauge

# GEOTECHNICAL ENGINEERING LABORATORY



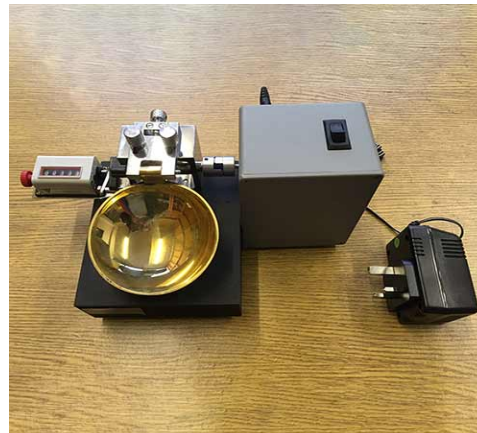
Consolidation Test Machine



Direct Shear Test Machine



Unconfined Compression Test Machine



Casagrande Apparatus



Constant Temperature Convection Oven

# GEOTECHNICAL ENGINEERING LABORATORY



CBR Mould with Box and Collar



Proctor Compaction Test Apparatus



Multifunctional Sample Extruder



Permeability Testing Apparatus



Field Density Test Apparatus



Standard equipment for Sieve Analysis

# SURVEYING LABORATORY



Total Station



Digital Theodolite



Alidade 18"



Plane Table With Tripod Case



Automatic Leveling Instrument

# SURVEYING LABORATORY



Digital Leveling Instrument



Optical Square



Spirit Level



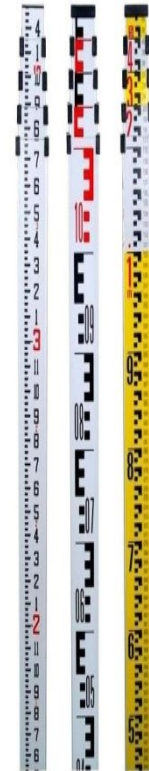
Hand GPS (with WASS capability)



Prismatic Compass with Stand



Aluminum Ranging Pole



Leveling Staff



# CURRENT RESEARCH PROJECT

**PROJECT** : **Frontiers in Energy and Energy Efficiency for Bangladesh**

Lead Researcher : Dr. Nadim Reza Khandaker, Associate Professor, DCEE

Other Researchers : Professor Dr. Mohammad Nazmul Islam, Chair, DCEE,  
Mr. Md. Tousif Rahman, Lecturer, DCEE

Funding Agency : Max Infrastructure Limited , MAX GROUP

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# CURRENT RESEARCH PROJECT

**PROJECT** : **Improvement of the Flash Flood warning device Sonabondhu through coupling with Hydrological Models**

Lead Researcher : Dr. Md. Sirajul Islam, Professor, DCEE

Other Researchers : Dr. Nova Ahmed, Associate Professor, DECE  
Dr. Nazmun Nahar, Associate Professor, DCEE  
Ms. Sifat Kalam, Lecturer, DCEE

Funding Agency : NSU

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# SEMINAR



*Seminar On*



*Environmental Applications of Nanotechnology:  
Electrochemical Carbon-Nanotube Filter for Removal and  
Inactivation of Viruses and Bacteria*

**Facilitator: Dr. Saifur Rahaman,**  
Associate Professor,  
Department of Building, Civil and Environmental Engineering  
Concordia University, Montreal, QC, Canada

Organized By

**Institutional Quality Assurance Cell (IQAC)**  
at  
**Department of Civil and Environmental Engineering**  
North South University

Day & Date: 20<sup>th</sup> July, 2017 Thursday  
Time: 10:30 AM to 11:30 AM  
Venue: Audi 801, NSU



*Seminar On*

*Slope Protection Using Vetiver System*

*Facilitator: Dr. Mohammad Shariful Islam*  
Professor, Department of Civil Engineering, BUET

Session Chair

Professor Dr. Sirajul Islam  
Professor, Department of Civil and Environmental Engineering  
North South University

Day & Date: 5<sup>th</sup> October, 2017, Thursday  
Time: 11:00 AM to 12:30 PM  
Venue: Audi 801, NSU

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# SEMINAR



## Seminar On

*Vulnerability of Coastal Bangladesh in a Changing Climate*

*Speaker: Dr. Susmita Dasgupta  
Lead Environmental Economist, The World Bank, Washington, D.C.*

*Session Chair  
Professor Mizan R Khan  
Professor, Department of Environmental Science and Management, NSU*

*Host  
Ms Sifat Kalam, Lecturer, Department of Civil and Environmental Engineering, NSU*

*Organized By  
Department of Civil and Environmental Engineering  
North South University*

*Day & Date: 18<sup>th</sup> December, 2017, Monday  
Time: 11:00 AM to 12:30 PM  
Venue: Audi 801, NSU*



## Seminar On

*Machine Learning for Applied Science and Engineering*

*Speaker: Kazi Tamaddun  
PhD Candidate, University of Nevada, U.S.A*

*Host  
Mr. Fokruddin Ahmad, Lecturer, Department of Civil and Environmental Engineering, NSU*

*Organized By  
Department of Civil and Environmental Engineering  
North South University*

*Day & Date: 27<sup>th</sup> December, 2017, Wednesday  
Time: 1:00 PM to 2:30 PM  
Venue: Audi 801, NSU*

*\*\*Light refreshment will be served\*\**

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# CONFERENCE

**ICFEI  
2018**



## **1ST INTERNATIONAL CONFERENCE ON FRONTIERS IN ENERGY & INFRASTRUCTURE**



**DEPARTMENT OF  
CIVIL & ENVIRONMENTAL ENGINEERING  
NORTH SOUTH UNIVERSITY**

### Academic Partner



• LEHIGH UNIVERSITY, USA.



• ROYAL UNIVERSITY, BHUTAN.

**DECEMBER 29-30,  
2018  
DHAKA, BANGLADESH.**

### Contact Information:

Email:

tousif.rahman@northsouth.edu

Phone: +880 2 55668200 EXT: 1990

For more info please visit  
<http://institutions.northsouth.edu/cee/>

### Conference Theme

- Built Environment & Building Physics
- Material & Energy
- Infrastructure & Sustainable Development



### Important Dates

Abstract  
Submission

March 31, 2018

Final Paper  
Submission

July 31, 2018

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# SEMINAR AND CONFERENCE



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# CIVIL FEST



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