



summer

SEPS newsletter

School of Engineering and Physical Sciences

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North South University (NSU), the first private university in Bangladesh, was established in 1993 by the NSU Trust, which comprises a group of philanthropists, industrialists, bureaucrats and academics. SEPS is the second largest school in NSU comprising four departments.

Editorial



It is with great pleasure I present to you the pioneering issue of tri-annual newsletter of School of Engineering and Physical Science (SEPS). SEPS is a dynamic school of NSU consisting of four departments: Electrical and Computer Engineering (ECE), Civil and Environmental Engineering (CEED), Mathematics and Physics (DMP), and Architecture. This newsletter is aimed to share our activities and also to generate ideas and discussions within SEPS and beyond, upholding the NSU motto "Seek Knowledge". Highlights of this issue are SEPS interaction with NSU BOT, SEPS accreditation with foreign partners, study tours, future programs, and stories on exciting achievements of both the faculty members and students of SEPS. Happy reading!

Advisory & Editorial Body

Advisory Body

Dr. Md. Sirajul Islam

Professor & Dean, SEPS

Dr. Arshad M. Chowdhury

Associate Professor & Chair, ECE

Dr. Javed Bari

Professor & Chair, CEED

Mujtaba Ahsan

Assistant Professor & Chair, Architecture

Dr. Partha Pratim Dey

Professor & Chair, DMP

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Dr. Mamun Molla, *Sub editor*

Shahriar Iqbal Raj, *Sub editor (Graphics)*

M. Shakhawwat Hossain, *Sub editor (Language)*

Akib bin Asad, *Student Contributor*

SEPS meets the new BOT Chairman

On 23 June 2015, the Dean, SEPS with the Chairs called on the office of the BOT Chair and greeted the new honorable Chairman of the NSU Board of Trustees Mr. M. A. Kashem with a floral bouquet. Mr. Kashem exchanged his views with the visiting team and pledged his full support for SEPS to make it a center of excellence in engineering education, not only in Bangladesh, but also in the region.



Mr. M A Kashem, recently took his office replacing Mr. Benajir Ahmed. Mr. Kashem, former President of FBCCI, is a CIP and one of the highest Tax-payers of the country. He is not only a veteran business leader, but also a visionary thinker, philanthropist, and social activist. He is the first in Bangladesh to introduce the idea of private university. He runs his own charity organization *M A Kashem Trust* to serve the poor and distressed. He was awarded numerous prestigious awards at both national and international levels for his professional accomplishments and social activism.

Prof. Rumana Riffat of George Washington University, USA is working with SEPS for accreditation



Professor Rumana Riffat visited NSU during May-June 2015 with the invitation of the Dean, SEPS. Dr. Riffat is the Associate Dean of the School of Engineering and Applied Science and a full Professor in the Department of Civil & Environmental Engineering at George Washington University (GWU), USA. She gave two seminars at NSU, one on engineering education in USA and the other on her research on low-cost wastewater treatment processes. During her stay, she closely worked with the Department of Civil & Environmental Engineering and the Department of Electrical and Computer Engineering, providing invaluable support



to prepare the BS programs of both the departments ready for obtaining accreditation from the US Accreditation Board for Engineering and Technology (ABET). It is noteworthy that Professor Riffat recently worked with ABET to successfully renew numerous curriculums in the School of Engineering at GWU. She rigorously reviewed the potential for ABET accreditation of the NSU engineering departments and submitted a report later. According to her report, she was highly impressed with the quality of teaching staff and overall infrastructural facilities of NSU and expects it to be accredited by ABET soon.



Faculty Members

- Dr. Arshad M. Chowdhury**, Associate Professor & Chair
Ph.D., Georgia Institute of Technology, USA
- Dr. Abul L. Haque**, Professor
Ph.D., University of Oklahoma, USA
- Dr. M Rokonzaman**, Professor
Ph.D., Memorial University of Newfoundland, Canada
- Dr. Shazzad Hosain**, Associate Professor
Ph.D., Wayne State University, USA
- Dr. K.M.A. Salam**, Associate Professor
Ph.D., Muroran Institute of Technology, Japan
- Dr. Hasan Uz Zaman**, Associate Professor
Ph.D., University of Michigan, USA
- Dr. Nova Ahmed**, Assistant Professor
Ph.D., Georgia Institute of Technology, USA
- Dr. Mohammad Rashedur Rahman**, Associate Professor
Ph.D., University of Calgary, Canada
- Dr. Mohammad Rezaul Bari**, Associate Professor
Ph.D., University of Canterbury, New Zealand
- Dr. Asad Jamil**, Assistant Professor
Ph.D., University of Colorado, USA
- Dr. Atiqur Rahman**, Assistant Professor
Ph.D., University of London, UK
- Dr. Rajesh Palit**, Assistant Professor
Ph.D., University of Waterloo, Canada
- Dr. Lamia Iftekhar**, Assistant Professor
Ph.D., Dartmouth College, USA
- Dr. Hafiz Abdur Rahman**, Associate Professor
Ph.D., University of British Columbia, Canada
- Dr. Mohammad Akhtar Hossain**, Assistant Professor
Ph.D., Texas A & M University, USA
- Dr. Nabil Shovon Ashraf**, Assistant Professor
Ph.D., Arizona State University, USA
- Dr. Mohammad Monirujaman Khan**, Assistant Professor
Ph.D., Queen Mary University of London, UK
- Dr. Sejuti Rahman**, Assistant Professor
Ph.D., Australian National University, Australia
- Iqbalur Rahman Rokon**, Senior Lecturer
MS, California State University, USA
- Mirza Mohammad Lutfe Elahi**, Senior Lecturer
M.Sc., University of Texas at Arlington, USA
- Md. Abu Obaidah**, Lecturer
M.Sc., University of Akron, USA
- Syed Fateh Al Kastur**, Lecturer
M.Sc., University of Arkansas, USA
- Tarif Riyad Rahaman**, Lecturer
M.Sc., Brandeis University, USA
- M Maksud Alam**, Lecturer
M.Sc., Purdue University, USA
- Ashfaqur Rahaman**, Lecturer
MSc., Texas Tech University, USA
- Mounota Majid Natasha**, Lecturer
MSc., University of Hull, UK
- Saad Azmeen-ur Rahman**, Lecturer
MSc., University of Oxford, UK
- Ishtiaque Hossain**, Lecturer
M.Sc., Western University, Canada
- Mohd. Azfar Nazim**, Lecturer
M.Sc., Karlsruhe Institute of Technology (KIT), Germany
- Silvia Ahmed**, Lecturer
M.S., University of Stuttgart, Germany
- Tanjila Farah**, Lecturer
M.Sc., Simon Fraser University, Canada



Field of Research

Artificial Intelligence & Robotics ■
Broadband Access and Communication
Technologies ■ Cloud Computing and
Distributed Systems ■ Data Networking
and Information Security ■ Database and



Dr. Nova Ahmed speaks as a panelist on Safer Internet

urging law enforcement agencies to take steps to raise awareness regarding cyber-crime

In a panel discussion organized by the renowned internet based news paper bdnews24.com on 29 August 2015 distinguished speakers talked about security issues and concerns in the growing cyber society of Bangladesh. Dr. Nova Ahmed from the ECE Department discussed several harassment stories and emphasized on prioritizing one's own safety on the net, urging the law enforcement agencies to take steps to raise awareness regarding cyber-crime among the young generation. Other guests present at the event included State Minister for Posts and Telecommunications Tarana Halim, State Minister for ICT Zunaid Ahmed Palak, RAB Director General Benazir Ahmed, and BTRC Director General Brig Gen M Emdadul Bari.

Dr. Nabil Ashraf is in the Marquis Who's Who in America

Dr. Nabil Ashraf of been awarded America in the Marquis Who's Who biographies of who have had through research

research that he has done in collaboration with the ECE final year students

the ECE Department has Marquis Who's Who in platinum edition listee. in America includes notable professionals considerable impact during their stay in USA. He also signed an agreement with Morgan & Claypool E-book publisher based in USA to compose a complete E-book on Emerging CMOS: New Technologies to Sustain Moore's Law Based Scaling. This is a research that he has done in collaboration with the ECE final year students.



Workshop on Microcontroller

On 27 May 2005, a workshop named "Beginning Hardware Projects with Arduino Microcontroller" was held at the ECE Department where students demonstrated their exciting microcontroller based hardware projects. Dr. Hasan Uz Zaman, an Associate Professor of the department, was the faculty presenter in the event. He discussed about the usefulness and ubiquity of microcontroller based designs in embedded systems. Baized Shuvo, Tahzib Mashrik, and a few other students also presented and demonstrated their projects at the workshop.



Besides Arduino, other microcontrollers such as MSP430, PIC, Raspberry PI etc. were discussed in the workshop. The workshop was well attended and highly appreciated by the attendees.

Technical Poster Competition at the ECE Department by INSB

On 10 August 2015 the ECE Department hosted a poster competition where many undergraduate student teams presented their research/project works. IEEE NSU Student Branch (INSB), a student chapter of the world's largest professional association Institute of Electrical and Electronic Engineers (IEEE), organized the competition.



Energy ■ Semiconductor Device and Technology ■ Singals and Image Processing ■ Software Engineering Technology Transfer and Policy ■ VLSI Technology ■ Wireless Communication Technology

Civil Fest 2015 to be held in October

CEED has planned to arrange its first ever Civil Festival tentatively in October 2015. The Civil Fest will be a daylong celebration of the civil and environmental engineering students. It will provide a meaningful platform to upcoming civil engineers across the country. They will be exposed to modern civil and environmental engineering education, scopes of higher studies, recent innovations, job market, the industry leaders, and many more aspects through competitions, multiple events, and technical sessions. Civil Fest at NSU is envisaged to be the frontrunner among civil engineering festivals in the country.

Prof. Rafiqul A. Tarefder of UNM, USA visits CEED

In May 2015, Professor Rafiqul A. Tarefder, PE from the Department of Civil Engineering of the University of New Mexico (UNM) visited the Department of Civil and Environmental Engineering (CEED), NSU. He also attended a meeting with the Vice-Chancellor Prof. Amin U. Sarkar, Executive Dean Prof. Bijoy Sahoo, Dean of SEPS Prof. Md. Sirajul Islam, and CEED Chair Prof. Javed Bari along with other CEED faculty members. He shared his experiences and provided valuable suggestions

Student exchange and research collaboration with the UNM



with regards to acquiring the ABET accreditation of BS CEE program and establishing student exchange and research collaboration with the UNM. He then visited the laboratories of CEED and met students in the field conducting surveying. Prof. Tarefder expressed his satisfaction to see the progress of CEED within a short span of time since its inception.



Faculty Members

- Dr. Md. Sirajul Islam**, Professor & Dean
Ph.D., The University of Tokyo, Japan
- Dr. Javed Bari**, Professor & Chair
Ph.D., Arizona State University, USA
- Dr. Mohammad Nazmul Islam**, Associate Professor
Ph.D., The University of Tokyo, Japan
- Dr. Nazmun Nahar**, Associate Professor
Ph.D., Purdue University, USA
- Dr. Nadim Khandaker**, Associate Professor
Ph.D., Pennsylvania State University, USA
- Dr. Daniel Ahmed**, Assistant Professor
Ph.D., Pennsylvania State University, (USA)
- Dr. Md. Jahidul Islam**, Assistant Professor
Ph.D., The National University of Singapore (NUS)
- S.M. Ashfaqul Hoq**, Lecturer
M.Sc. Engg., University of Texas at Arlington, USA
- Nawrin Anwar**, Lecturer
M.Sc. Engg., University of Western Ontario, Canada
- Faisal Shakib Ahmed**, Lecturer
M.Sc., University of Texas at Arlington, Texas, USA
- Sifat Kalam**, Lecturer
M.A.Sc., University of British Columbia (UBC), Canada



Field of Research

- Structural Dynamics ■ Building Safety and Stability Issues ■ Building Retrofitting ■ Green Building ■ Construction Engineering and Management ■ Geotextile ■ Advance Engineering Materials ■ Transportation Planning and Traffic Analysis ■ Pavement Design ■ Climate Change Impact and Adaptation Related to Water Resources and Infrastructure ■ Water Supply and Sanitation ■ Low Cost Water Treatment ■ Arsenic Contamination ■ Urban Engineering ■ Hydrological and Environmental Modeling

Civil Engineering Department of MIST at CEED, NSU

An 8-member team of the Civil Engineering Department of the Military Institute of Science & Technology (MIST) visited CEED on 2 September 2015. Col. Shah Md. Muniruzzaman, Head, CE Dept., headed the team. The team visited the labs, department office, and later NSU library. Col. Muniruzzaman has expressed his felicitations and was highly impressed with the facilities that CEED provides to its students. The team

MIST highly impressed with the facilities that CEED provides



also participated in a meeting with the Vice-Chancellor (In-Charge) Prof. Dr. Gour Gobinda Goswami, Dean of SEPS, Chair of department of Architecture, Mathematics & Physics and the faculty members of CEED.

Dr. Khandaker's Visit to Bhutan Conference



Dr. Nadim Khandaker, P.Eng., attended a Conference on Sustainable Development and Renewable Energy jointly organized by WEENTECH United Kingdom and the

Royal University of Bhutan in Thempu from 15-17 June 2015. Dr. Khandaker, who currently holds three patents in Sandia National Lab, presented three papers and was awarded the prestigious Active Participation Award voted by the panel of judges.

CEED at Bureau Veritas (Bangladesh) Private Limited

CEED has visited the Head Office of Bureau Veritas (Bangladesh) Private Limited. The purpose of the visit was to propose an agreement for a better and more sophisticated testing and consulting services in CEED Laboratories for structural and fire safety compliances of the garments factory inspections in Bangladesh.

CEED Laboratories for structural and fire safety compliances of the garments factory inspections in Bangladesh.



The CEED team including the Dean (SEPS) Prof. Dr. Md. Sirajul Islam and CEED faculty members discussed regarding the testing methods and other related aspects with the top officials of Bureau Veritas.

SEPS Delegates at ABET Symposium in USA



Prof. Dr. Md. Sirajul Islam, Dean, SEPS and Dr. Arshad Mahmud Chowdhury, Chair, ECE have visited annual symposium of the Accreditation Board of Engineering and Technology (ABET), at Atlanta, Georgia, USA. This yearly event of ABET comprises a 3-day session detailing the entire ABET accreditation process. Attending the seminar was an invaluable experience for the SEPS delegates, which will expedite the ABET accreditation process of SEPS departments. As part of the tour, Dean, SEPS also visited the Innovation Studio Lab. of Georgia Institute of Technology, where the senior level engineering students conduct their Capstone design projects. Both the members later attended the annual Capstone Design Expo of Georgia Tech in the following day. Prof. Siraj was elected as a

Dean, SEPS and Chair, ECE have visited annual symposium of the Accreditation Board of Engineering and Technology (ABET), at Atlanta, Georgia, USA

judge of the this Expo and assessed a number of capstone projects. Later, Prof. Islam also visited the State University of New York (SUNY), Farmingdale on probable collaboration. He met the Dean of the Engineering School and also the Associate Dean of Business school. Apart from this, he met high officials of SUNY including Director (External Affairs), Director (Research) and two Bangladeshi faculty members Dr. Nazrul Islam and Prof. Abdul Awal.

Prof. H. Rashid at SEPS on Accreditation Matters

Prof. Rashid met ECE and CEED chairs and few other faculty members on ABET accreditation matters

Professor Harunur Rashid, Department of Electrical and Computer Engineering, University of West Florida, visited NSU in June 2015. Prof. Rashid is an eminent academic having vast experience in his field. He is a registered ABET program evaluator, who evaluated a large number of engineering programs on behalf of ABET. On a short visit to NSU, he met the ECE and CEED Chairs and few other faculty members on ABET accreditation matters and exchanged his views. He also donated his book to NSU published recently on ABET accreditation and handed over a large volume of teaching materials related to power electronics.

Industrial Advisory Board Meeting



The Industry Advisory Board Meeting of the ECE Department was held on 28 February 2015. The Vice Chancellor of NSU, Faculty members of the ECE Department and various representatives of the Industry were present. An overview of the ECE department, programs and the ABET accreditation process was given by Dr. Arshad Chowdhury, Chairman of the ECE Dept, who also discussed regarding the necessity of Industry attachment to review the curriculum of ECE programs as well as ABET requirement. Prof. Bijoy Sahoo, Consultant, Ed-

News from the Office of Dean

Visit to MIST Laboratories



Dr. Sirajul Islam visited Military Institute of Science and Technology (MIST). He met Brig. Gen. Habibur Rahman Kamal, former Dean of the School of Engineering and Col. Shah Md. Muniruzzaman, Chair of the Civil Engineering department. Later he visited all the laboratories under the department of Civil Engineering. Prof. Jahid, Prof. Tawhid, and Lt. Col. Tareq of MIST accompanied him and showed the laboratory facilities.

Meeting with Chief Coordinator, Padma Multipurpose Bridge Project

Dr. Sirajul Islam met Major General Abu Syeed Md Masud, Chief Coordinator, Padma Multipurpose

Gen. Masud agreed to facilitate field visit of CEED faculty and students at Padma Bridge site

Bridge Project, in his office at Army Headquarters. Gen. Masud, a veteran civil engineer and long course commissioned officer in the Engineering Corps of Bangladesh Army, is widely experienced with army construction. He shared his experience of involvement with different construction projects of national interest by Bangladesh Army. Dr. Islam invited him to offer a seminar at NSU premises on his experience. He agreed to visit NSU and meet the students soon. Gen. Masud also agreed to facilitate field visit of CEED faculty and students at Padma Bridge site.

This winter, several batches of faculty and students are scheduled to visit Padma Bridge site accordingly.

Dean, attended International conference as Session Chair



Prof. Dr. Md. Sirajul Islam, Dean, SEPS was invited as Chair of the Session at the Third International Conference on Climate Change in Relation to Water and Environment (13CWE) held on 9-11 April, 2015 at Dhaka University of Engineering and Technology (DUET), Gazipur. Around hundred papers by local and international presenters were presented in the conference. Prof. Islam Chaired the session related to technology for adaptation to climate change in the water resources sector.

NSU is going to host ACM-ICPC 2015



ACM International Collegiate Programming Contest is an annual multitier competitive programming competition among the universities of the world. IBM supports the contest. NSU is going to gladly host this most prestigious ACM-ICPC Dhaka Regionals on Saturday, 14 November 2015. The top two teams from the Dhaka regional contest will receive tickets to the World Finals to be held in Europe next year. In this mega event, more than 80 universities from the country and also from the Asian region will participate. Expectedly 150 teams, 3 contestants in each, from Bangladesh, Bhutan, China, India, Malaysia, and Nepal, will make this ACM-ICPC competition vibrant.

educational Quality, NSU informed about the necessity of industry participation in the academic institution for academic enrichment and job placement for NSU students. The participant of Industry members and faculty members exchange their views regarding the various issues and suggestions included focusing on Power section, introducing Capstone Design Projects, instilling particular expertise such as developing mobile and gaming apps as well as the knowledge of latest innovations amongst the students.

CONVOCATION 2015 Valedictorian from ECE Department



The 18th convocation of NSU was held on 2 May 2015 at NSU campus. A total of 1485 undergraduates and 551 graduate students graduated at this convocation. The valedictorian of the convocation is from the ECE department – Muneera Chowdhury. Muneera Chowdhury is a treasured alumna of North South University and the pride of the School of Engineering and Physical Sciences. Muneera graduated with a cumulative GPA or CGPA of 4.0. She was the recipient of the highest of honors and awards - the Summa Cum Laude and the Chancellor's Gold Medal, and was selected as the Valedic-

Muneera was the recipient of the highest of honors and awards - the Summa Cum Laude and the Chancellor's Gold Medal.

torian of the Class of 2015. Muneera completed her A Levels from the Muscat International School in Oman and in Mastermind School, Dhaka. She enrolled in the BSEEE program in NSU in 2009. During her undergraduate studies, she also served as a Teaching Assistant for numerous engineering courses and also served as a Lab Instructor for over a year. She is an innovative electrical engineer trained in analogue and digital signal processing with an ambition to excel in telecommunications engineering.

A voracious reader of fiction, Muneera also likes knowing about new and upcoming technologies. She is also a skilled organizer of events, enjoys sports as a pastime, and volunteers in many social services. Muneera Chowdhury is currently pursuing her Master's degree in Electrical and Computer Engineering at the prestigious University of Toronto, Canada, majoring in Communication. The School of Engineering and Physical Sciences wishes her all the very best in her academic endeavors.

Daily Star HSBC Climate Champions



Prof. Dr. Md. Sirajul Islam, Dean, SEPS was invited and served as one of the four judges in Daily Star-HSBC Junior Climate Champions final round competition, which took place at the Daily Star premises in Dhaka on 23 May 2015. He, along with few other NSU students were also involved in organizing this event. Later, in an auspicious occasion, Minister of Cultural Affairs Mr. Asaduzzaman Noor, as Chief Guest distributed prizes among the champions. Mr. Mahfuz Anam, Editor, Daily Star and Country Representative of HSBC were present there as Special Guests.

A Group of US Students at SEPS



A group of US students led by Dr. S. Mohsin Hashim, Professor of Political Science and Director of Dana Honors Program, Muhlenberg College, visited SEPS in May 2015 with the invitation of the Dean of SEPS. The group was working on environment, development, and sustainability issues in the US and visited Bangladesh to gather practical knowledge in the respective fields. They attended a seminar at NSU to exchange views on climate change and sustainability issues. They also visited NSU campus and its facilities.

Grontmij Team met CEED and SEPS Dean



Delegates from Grontmij, led by its country representative Ms. Hillarie C. recently visited CEED faculty members at SEPS Dean's office. Grontmij is an internationally reputed firm and works worldwide with water supply and sanitation infrastructure construction and maintenance. Delegates visited different laboratories and facilities of NSU. They appreciated infrastructures of NSU and showed interest in recruiting Interns from CEED and extend collaboration in consultancy and research with CEED faculty members.



Faculty Members

Mujtaba Ahsan, Assistant Professor & Chairman
Arch.D., University of Hawaii, USA

Haroon Ur Rashid, Professor
Master of Architecture, University of Hawaii, USA

Dr. Carlo Santoro, Assistant Professor
Ph.D., Universita Degli Studi de Roma, Italy

Dr. Saiful Islam, Assistant Professor
Ph.D., Texas A&M University, USA

Shaila Joarder, Assistant Professor
M.BEnv, University of New South Wales, Australia

Shahriar Iqbal Raj, Senior Lecturer
M.Sc., University of New Castle Upon Tyne, UK

Ismat Hossain, Senior Lecturer
Masters, Dessau Institute of Architecture, Anhalt University, Germany

Adnan Hossain, Senior Lecturer
M.Sc., Oxford Brookes University, UK

Fawaz Aziz Rob, Senior Lecturer
M.A. Florence Design Academy, Italy

Maruf Hossain, Senior Lecturer
M. Engr Gifu University, Japan

Amity Kundu, Lecturer
M.Arch, University of Pennsylvania, USA

Shanjida Fatema Shamma, Lecturer
M.ARCH., Anhalt University of Applied Sciences, Germany

Ishraq Zahra Khan, Lecturer
M.A., Architectural Association, UK



Field of Research

Sustainable built forms ■ Building automation ■ Matrix of Green Building certification ■ Eco-housing ■ Sustainable building envelop design ■ Architecture theory & practice ■ Concepts of urbanization ■ Fire safety culture in practice ■ Rain water harvesting ■ Energy simulation ■ Building thermal comfort ■ Heat island effect ■ Methods and themes of contemporary design and construction ■ Urban development and heritage preservation

Lecture by Architect Rafiq Azam

Renowned Architect Rafiq Azam gave a lecture and presentation at the faculty lounge of North South University on 6 April 2015.

The speaker narrated his journey of how he became an architect. Architect Azam has received several design awards in Bangladesh and from abroad, and his practice now extends into Pakistan and Malaysia. He has lectured widely in universities in the USA, including the University of Pennsylvania, University of Hawaii, and at almost all universities in the country. Architect Azam's becoming and presentation inspired the students and faculties alike.



Capstone Thesis Project Jury at the Department



The Department of Architecture held its Summer Capstone Thesis Project Jury with great fanfare over two days, 13-14 June 2015, at its Sky Gallery. Twenty-eight students completed their fifth year design studio this semester. A jury board was formed which consisted some of the core and part-time faculty members and renowned practicing architects, including Bashirul Haque, N.R. Khan and Kamal Bhuiyan. NSU alumni and students joined the event. The course teacher Professor Haroon Ur Rashid and

A number of projects received critics' acclaim as outstanding works



practicing architect Mojafar Chowdhury led the presentations. A number of projects received critics' acclaim as outstanding works, which included the Design of a Center for Blind Children by Sharfuddin Siddique, Proposed NSU Campus Design at Purbachal by Nafiur Rahman, KirtanKhola Riverfront Revitalization by Mainul Islam, the Design of Fine Arts Department Complex at Jahangirnagar University by Mostasim Billah, and Agricultural University Design at Jhenaidah by Israt Jahan.

Study Tour to North Bengal



Forty six students and four faculty members, including Professor Haroon Ur Rashid, Mr. Mujtaba Ahsan, Mr. Shahriar Iqbal Raj, and Mr. Maruf Hossain, went on a study tour from the Department of Architecture during the semester break from 3-5 September 2015 to visit architectural heritage sites in North Bengal. North Bengal provides an opportunity to explore rich architectural heritages, including the Mahasthan, also known as (ancient) Pundranagar, which is the site of cultures as old as the 3rd Century BCE.

The study tour helps the teachers to practically demonstrate what they theoretically teach in the classes.

North Bengal also has heritages from the periods of Gupta Rule (3rd to 6th Century CE), Pala rule (8th to 12th Century CE), and Early Islamic rule (13th to 16th Century CE). Moreover, The Shoampur Mahavihara at Paharpur, a world heritage site, dates back to 770 CE and demonstrates the remarkable architectural heritage of this region. Students and teachers also visited the Kherua Mosque, Navaratna Temple at Sirajganj, the Uttara Ganabhaban, and the Friendship Center at Gaibandha. The study tour helps the teachers to practically demonstrate what they theoretically teach in the classes. At the same time, the tour assists students to learn through fun!

Celebration of First Anniversary of the DMP



Department of Mathematics and Physics (DMP) is newly established department at NSU formed only around one year back. Before this, the present faculty members of DMP belonged to the Electrical and Computer Engineering (ECE) Department. At the first anniversary of DMP at NSU, it arranged a discussion session followed by lunch on 27 August 2015 at the conference room of the ECE Department. All DMP Faculty members and their previous

colleagues of ECE were present along with the Dean of SEPS Prof. Dr. Md. Sirajul Islam as special guest and the Vice Chancellor (in-charge) Prof. Dr. Gour Gobinda Goswami as the chief guest.

Pi Day Celebration



its of the value of pi, i.e., 3.141592653 can be arranged as March 14, 15, 9:26:53. We call this special moment as the pi-moment. This moment will come again in 2115, one hundred years later. At this precise moment (according to Bangladesh-time) of this century, students from various departments of NSU participated in a celebration of the moment. They formed a human circle with a diameter.

Professor Partha Pratim Dey, the chairman of the Department was present at the event along with a few other faculty members, namely, Kazi Abu Sayeed, Hasina Akter, and Muhammad Asad-uz-Zaman. A few part time faculty members were present as well as Golam Dastagir Al Quaderi, a faculty member of the Physics Department at Dhaka University, who participated as a guest. The initiative was taken by Naureen Ahsan, a part time faculty member at NSU and a full time faculty member at Dhaka University.

DMP celebrated the pi-moment of the century at the NSU campus. Pi is the ratio of the circumference of a circle to its diameter. It is symbolized by the greek letter pi in the lower case (π). This is a fixed quantity, which is usually taken to be 3.14. The number of digits after the decimal is infinite. In the western countries, especially in the US, March 14 (written 3/14 in the American style) is celebrated every year as the pi-day. March 14 this year is a bit more special. The first ten dig-

The pi-moment will come again in 2115.



Faculty Members

- Dr. Partha Pratim Dey**, Professor & Chair
Ph.D., Bowling Green State University, USA
- Dr. Miftahur Rahman**, Professor
Ph.D., University of Massachusetts Lowell, USA
- Dr. Kazi Abu Sayeed**, Associate Professor
Ph.D., University of Cincinnati, USA
- Dr. Muhammad Nurul Islam**, Associate Professor
Ph.D., University of Calgary, Canada
- Dr. Abu M Khan**, Associate Professor
Ph.D., University of Florida, USA.
- Dr. Mamun Molla**, Assistant Professor
Ph.D., University of Glasgow, UK
- Dr. Md. Sahadet Hossain**, Assistant Professor
Ph.D., Chemnitz University of Technology, Germany
- Dr. Muhammad Asad-uz-Zaman**, Assistant Professor
Ph.D., Washington State University, USA
- Dr. Hasina Akter**, Assistant Professor
Ph.D., University of North Texas, USA
- Dr. Subir Chandra Ghosh**, Assistant Professor
Ph.D., McMaster University, Canada
- Dr. Mohammad Monir Uddin**, Assistant Professor
Ph.D., Max Planck Institute, Germany
- Muhammed Mustak Mia**, Senior Lecturer
MS, University of Dayton, USA
- Zasim U. Mazumder**, Senior Lecturer
MS, University of Dayton, USA
- Md. Zahangir Hossain**, Lecturer
M.Sc., Memorial University, Canada
- Atai Afroz**, Lecturer
M.Sc., University of Milan, Italy



Field of Research

Computational Fluid Dynamics ■ Coding Theory and Mathematical Modeling ■ Control Theory and Modeling ■ Nanomaterials ■ Solar Energy ■ Representation Theory ■ Dynamic Theorem and Ergodic Theory ■ Theoretical High Energy Physics ■ Particle Physics ■ Mechatronics and Robotics ■ Stochastic and Probabilistic Modeling

Bi-weekly Colloquium



The DMP has initiated a plan to organize bi-weekly colloquium on the Application of Mathematics and Physics in real life. Dr. Mamun Molla, Assistant Professor, was the speaker of the

first colloquium which was held on 16 September 2015 in the ECE conference room; his paper was entitled "Application of Mathematics in Real Life Using the Computational Fluid Dynamics".

Dr. Hossain attended conference in Malaysia

Dr. Mohammad Sahadet Hossain, Assistant professor, Department of Mathematics and Physics, attended the 4th International Conference on Engineering Mathematics and Physics (ICEMP 2015) in Kuala Lumpur, Malaysia, on June 10-15, 2015, and presented a paper was entitled "Reduce Order Modelling of Power System Models Using Interpolatory Projections Technique". His paper was selected as one of the most excellent papers. Dr. Hossain is also a regular guest research visitor at the International



Max-Planck Institute (MPI) for Dynamics of Complex Technical Systems, Magdeburg, Germany.



NSU wins TechFest Championship

NSU became the Champion of Techfest' 15

A robotics team from NSU became the Champion of Techfest' 15 in the Obstacle Race category held on 5 September 2015 at NewsCred, Banani, organized by Project BE. Six students from the ECE Department were in the team - Tahzib Mashrik, A.S.M. Muktadiru Baized Shuvo, Fahim Sarower, Hasib Zunair, and Taki Uddin. The task was to steer an automated robot through an obstacle course. NSU's robot managed to complete the task in only 13 seconds. Not only did it perform in the shortest time, the robot was also the only one among the 14 participating teams to complete the course flawlessly.



Top-Up IT Training Program for NSU Students



Inaugural ceremony of the Top-Up IT Training program for NSU students, supported by the ICT Division of the Government of Bangladesh, was held on 7 September 2015 at AUDI 801, NSU. The program was presided by Prof. Dr. Gour Gobinda Goswami, Vice Chancellor (in-charge). Honorable Chair, Board of Trustees (BoT), North South University Trust, Mr. M. A.

NSU has signed an MoU with the ICT Division of Bangladesh Government

Kashem attended the occasion as the Chief Guest. Mr. Kamal Mansharamani, Director, Ernst & Young LLP, Mr. Kamalesh Vyas from Ernst & Young, and Mr. Enamul Kabir, Director, Training, Bangladesh Computer Council (BCC) attended the program as Special Guests. The Executive Dean of NSU Prof. Dr. Bijoy Sahoo, the Dean of SEPS Prof. Dr. Md. Sirajul Islam, and the Chair of the ECE Department Dr. Arshad M. Chowdhury also delivered speeches in the program. NSU has signed an MoU with the ICT Division of Bangladesh Government

recently, under which a group of selected senior students of relevant undergraduate programs of NSU will be trained on industry based up-to-date ICT related Top-Up courses. The world renowned consulting company Ernst & Young will be the trainer for this program for a period of 300 hours contact time. After successful completion of the program, a commitment is there that a percentage of top scorers will be recruited by reputed national and international ICT related companies. Apart from this, a certificate under the program from Ernst & Young and ICT Division, as well as another certificate from George Washington University, USA will be provided to successful participants. Prof. Md. Sirajul Islam, Dean, SEPS coordinates the entire program from NSU part. Mr. Mahesh and Ms. Snjana Ghani, on the other hand, coordinate the program from the government part.

Admission: Fall 2015 ECE got the highest enrollment

Undergraduate admission test for Fall 2015 was held on 31 July 2015. A total of 1073 students were admitted at undergraduate level this semester, out of which 332 students enrolled in various programs of the ECE department, making it the highest in terms of popularity as a department. As a whole, SEPS as a school got 389 students, which is the second highest in NSU right after the Business school. In fact, in recent years the number of students in SEPS has increased significantly and at a much faster rate than any other school of NSU. An orientation program was held for the new students of all the departments on 6 September. ECE Department arranged its own orientation afterwards, including a campus tour.

Farewell to the Past BOT Chair



A farewell meeting was arranged for the immediate past Chair of the Board of Trustees (BoT) Mr. Benajir Ahmed at NSU syndicate hall on the occasion of his last day of office at NSU. All academic and ad-

ministrative heads of the university attended the meeting. All the attendees of the meeting highly praised the very dynamic and fruitful 1-year tenure of the

During his tenure, NSU has undergone a massive growth in its infrastructure

past Chair, BoT. In fact, during his tenure, NSU has undergone a massive growth in its infrastructure which includes launching of the new Auditorium, International Seminar Hall, outdoor play ground, and indoor sports complex. Apart from this, he was pioneer in buying 250 bigha land near Purbachal for its second campus. He also encouraged the outreach activities of NSU during his tenure, which helped the university grow significantly.