

ECE Undergraduate Orientation Spring 2023



DEPARTMENT OF
ELECTRICAL & COMPUTER ENGINEERING

School of Engineering and Physical Sciences (SEPS)

North South University

Monday, 23 January 2023





North South University

#601-800

NSU Ranked #1

In Bangladesh with the following international university ranking agencies

1. Times Higher Education (THE): **2023** (Public/Private Universities)
2. QS World University Ranking: **2022, 2021, 2020** (Private)
3. QS Asia University Ranking: **2023, 2022, 2021, 2020, 2019** (Private)
4. Webometrics University Ranking: **2022** (Private)

Welcome
New Students!

#301-400

Electrical and Electronic Engineering (EEE)

#501-600

Computer Science and Engineering (CSE)



North South University

- **North South University:** The first private university in Bangladesh
- **Established:** 1992
- **Formally inaugurated:** 10 February, 1993
3 Programs: Computer Science, Economics, BBA
137 Students in First freshman classes

- **Today NSU has:**

4	Schools	600+	Full-time faculty
6	Institutes	200+	Administrative Staffs
17	Academic Departments	25000+	Registered Students
19	Undergrad degree programs	28000+	Alumni base
15	Graduate degree programs	23	Convocations completed

- **Website:** www.northsouth.edu



Prof. Atiqul Islam
Vice-Chancellor, NSU



Dr. M. Ismail Hossain
Pro-Vice-Chancellor, NSU

School of Business and Economics, School of Humanities & Social Sciences, School of Health and Life Sciences

School of Engineering & Physical Sciences (SEPS)



Prof. Javed Bari
Dean, SEPS
NSU

- ☐ Architecture (Arch)
- ☐ Civil and Environmental Engineering (CEE)
- ☒ **Electrical and Computer Engineering (ECE)**
- ☐ Mathematics and Physics (DMP)

≈ 6,000
students





Faculty Members



Dr. Nova Ahmed (NvA)



Ms. Silvia Ahmed (SvA)



Dr. Nadia Anam (NIN)



Dr. Mahdy Rahman
Chowdhury (Mdy)



Dr. Shohana Rahman
Deeba (SRD1)



Mr. Mirza Mohammad
Lutfe Elahi (MLE)



Ms. Tanjila Farah (TnF)



Ms. Ashfia Binte Habib
(ABH1)



Dr. Dihan M Nuruddin
Hasan (DMH)



Dr. A S M Jahid Hasan
(New)



Ms. Sharita Hasan
(SSH1)



Mr. Rifat Ahmed Hasan
(RIH)

Faculty Members



Dr. Shazzad Hosain (Szz)



Md. Naqib Imtiaz
Hussain (NqH)



Md. Shahriar Hussain
(HSM)



Dr. Lamia Iftekhar (LIH)



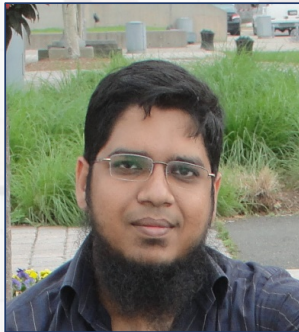
Mr. Md. Shahriar Karim
(MSK1)



Mr. Syed Fateh Al
Kastur (FKr)



Dr. M Monirujjaman
Khan (KMM)



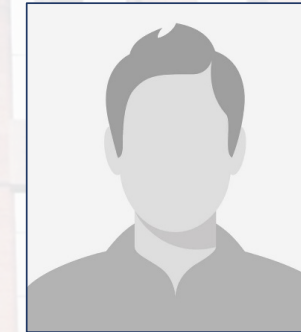
Dr. M Ashrafuzzaman
Khan (AzK)



Dr. Riasat Khan (RtK)



Dr. Mohammad Abdul
Matin (MtN)



Mr. Tarek Mizan
(TIM)



Dr. Nabeel
Mohammed (NbM)

Faculty Members



Dr. Sifat Momen (Sfm1)



Mr. Intisar Tahmid
Naheen (ITN)



Dr. Nafisa Noor (NaNr)



Md. Abu Obaidah (AbO)



Mr. M Shafayat
Oshman (MOU)



Dr. Rajesh Palit (RjP)



Dr. Mohammad Abdul
Qayum (New)



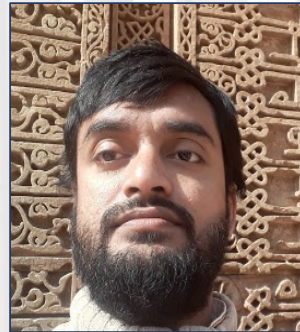
Dr. M Rashedur Rahman
(RRn)



Dr. Hafiz Abdur
Rahman (HzR)



Dr. Atiqur Rahman (Aqu)



Dr. Ahsanur Rahman
(ARa2)



Dr. Tanzilur Rahman (TNR)

Faculty Members



Dr. Shafin Rahman (Sfr1)



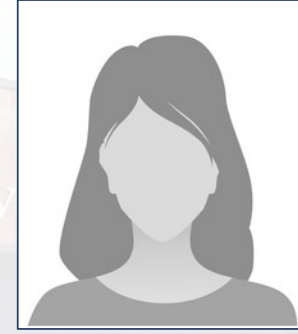
Mr. Iqbalur Rahman
Rokon (IqR)



Dr. M Rokonzaman
(RKZ)



Dr. Kazi Mohd. Abdus
Salam (KAS)



Ms. Tanzilah Noor
Shabnam (TNS1)



Ms. Meem Tasfia
Zaman (MEZ)

New Members



Dr. Abu Sayed Latiful
Hoque (SLF)



Dr. Fariah Mahajabeen
(FMA)



Md. Ishan Arefin
Hossain

Administrative Staff Members



Mr. Saidur Rahman
Senior Program Officer



Ms. Atiqun Noor
Faculty Assistant



Mr. Sheikh Farid Akter
Faculty Assistant



Mr. Sazzad Chowdhury
Department Secretary



Mr. Kazi Wahiduzzaman
Record Assistant



Md. Shukkur Dewan
Office Support Staff



Mr. Kutub Uddin
Office Support Staff



Md. Saidul and others
Office Support Staff

Programs and Course Curriculum

Electrical and Computer Engineering (ECE)

BAETE
Accredited

- ☐ BS in Computer Science and Engineering (CSE)
- ☐ BS in Electrical and Electronic Engineering (EEE)
- ☐ BS in Electronic and Telecommunication Engineering (ETE)

- ☐ MS in Computer Science and Engineering (CSE)
- ☐ MS in Electrical and Electronic Engineering (EEE)
- ☐ MS in Electronic and Telecommunication Engineering (ETE)



DEPARTMENT OF
ELECTRICAL & COMPUTER ENGINEERINGNORTH SOUTH UNIVERSITY
SCHOOL OF ENGINEERING
& PHYSICAL SCIENCES

ABOUT US UNDERGRADUATE GRADUATE PEOPLE RESEARCH STUDENT ACTIVITIES RESOURCES INDUSTRY ALUMNI CAPSTONE DESIGNS FAQ LOGIN

UNDERGRADUATE

Admission

Prospective Students

Transfer Students

Internal Transfers

External Transfers

Academics

Programs

Advising

Policies

Directed Research (498R)

Financial Aid

Internship (498R)

Home > Undergraduate > Academics > Programs

<http://ece.northsouth.edu>

PROGRAMS

The Department of Electrical and Computer Engineering (ECE) currently offers the following undergraduate degree programs:

Effective from Fall 2014 and onward

- Bachelor of Science in Computer Science and Engineering (BSCSE) – 130 credit hours
- Bachelor of Science in Electrical and Electronic Engineering (BSEEE) – 130 credit hours
- Bachelor of Science in Electronics and Telecommunication Engineering (BSETE) – 130 credit hours

The above degree programs refer to the revised curriculum incorporating university-wide broad-based general education components effective from Fall 2014 and later.

Prior to Fall 2014

- Bachelor of Science in Computer Science and Engineering (BSCSE) – 134 credit hours
- Bachelor of Science in Electrical and Electronic Engineering (BSEEE) – 135 credit hours
- Bachelor of Science in Electronics and Telecommunication Engineering (BSETE) – 128 credit hours

Students who enroll under the curriculum prior to Fall 2014 and wish to transfer to the later curriculum (effective from Fall 2014) may apply using the curriculum transfer form through the ECE Program office located at SAC942

Prior to Fall 2012

Students enrolled prior to **Fall 2012** should refer to the appropriate General Catalog or contact the ECE Program Office (SAC942) for assistance.

Degree Requirements

SL #	Category	Credits
1	General Education (GED) / University Core	34
2	Basic Sciences / SEPS Core	38
3	CSE/EEE/ETE Major Core	42
4	CSE/EEE/ETE Major Capstone Design Project (2)	4
5	CSE/EEE/ETE Major Electives (3)	9
6	Open Electives (1)	3
7	Intern/Co-op (minimum 8- 12 weeks)	Non-credit
	Total Credit	130 Credits

CSE

	Semester 1	Semester 2
1 st Year	ENG102 (3 cr.) MAT116 (0 cr.) MAT120 (3 cr.) CSE115+CL (4 cr.) GED 1 (3 cr.)	ENG103 (3 cr.) MAT125 (3 cr.) MAT130 (3 cr.) CSE215+CL (4 cr.) CSE173 (3 cr.)
2 nd Year	ENG111 (3 cr.) GED 2 (3 cr.) MAT250 (3 cr.) PHY107+CL (4 cr.) CSE225+IL (3 cr.) EEE141 + CL (4 cr.)	HIS102 (3 cr.) PHY108 +CL (4 cr.) MAT350 (3 cr.) CSE231+IL (3 cr.) CSE311+IL (3 cr.) EEE111 + CL (4 cr.)
3 rd Year	GED 3 (3 cr.) CHE 101+CL (4 cr.) EEE154 (1 cr.) CSE299 (1 cr.) BIO103+CL (4 cr.) CSE373 (3 cr.) CSE332 (3 cr.)	GED 4 (3 cr.) GED 5 (3 cr.) MAT361 (3 cr.) CSE327 (3 cr.) CSE331 + IL (3 cr.) CSE323 (3 cr.)
4 th Year	GED: 6 (3 cr.) EEE452 (3 cr.) ELECT1 (3 cr.) CSE425 (3 cr.) CSE499A (1.5 cr.)	ELECT2 (3 cr.) ELECT3 (3 cr.) OPEN ELECT (3 cr.) CSE499B (1.5 cr.) CSE498R (0 cr.)

	Semester 1	EEE Semester 2
1 st Year	ENG102 (3 cr.) MAT116 (0 cr.) EEE141+CL (4 cr.) MAT120 (3 cr.) GED 1 (3 cr.)	ENG103 (3 cr.) MAT 125 (3 cr.) MAT130 (3 cr.) EEE241+CL (4 cr.) PHY107+CL (4 cr.)
2 nd Year	ENG111 (3 cr.) CSE115+CL (4 cr.) MAT250 (3 cr.) MAT350 (3 cr.) EEE111+CL (4 cr.)	MAT361 (3 cr.) EEE211+IL (3 cr.) EEE221 (3 cr.) EEE311+CL (4 cr.) PHY108 +CL (4 cr.) GED 2 (3 cr.)
3 rd Year	EEE361 (3 cr.) EEE154 (1 cr.) HIS102 (3 cr.) CHE 101+CL (4 cr.) EEE299 (1 cr.) GED 3 (3 cr.) GED 4 (3 cr.)	EEE312+IL (3 cr.) EEE342+CL (4 cr.) EEE363+CL (4 cr.) BIO103+CL (4 cr.) GED 5 (3 cr.)
4 th Year	EEE362+IL (3 cr.) EEE452 (3 cr.) EEE321+IL (3 cr.) ELECT1 (3 cr.) GED 6 (3 cr.) EEE499A (1.5 cr.)	ELECT2 (3 cr.) ELECT3 (3 cr.) OPEN ELECT (3 cr.) EEE499B (1.5 cr.) EEE498R (0 cr.)

	Semester 1	ETE Semester 2
1 st Year	ENG102 (3 cr.) MAT116 (0 cr.) MAT120 (3 cr.) ETE141+CL (4 cr.) GED 1 (3 cr.)	ENG103 (3 cr.) MAT125 (3 cr.) MAT130 (3 cr.) ETE241+CL (4 cr.) PHY107+CL (4 cr.)
2 nd Year	ENG111 (3 cr.) GED 2 (3 cr.) MAT250 (3 cr.) MAT350 (3 cr.) ETE111+CL (4 cr.) CSE115+CL (4 cr.)	GED 3 (3 cr.) MAT 361 (3 cr.) ETE211+IL (3 cr.) ETE221 (3 cr.) ETE311+CL (4 cr.) PHY108 +CL (4 cr.)
3 rd Year	HIS102 (3 cr.) GED 4 (3 cr.) GED 5 (3 cr.) CHE 101+CL (4 cr.) ETE299 (1 cr.) EEE154 (1 cr.) ETE321+IL (3 cr.)	GED 6 (3 cr.) ETE331+IL (3 cr.) ETE361 (3 cr.) ETE471+IL (3 cr.) BIO103+CL (4 cr.) EEE452 (3 cr.)
4 th Year	ETE424+CL (4 cr.) ETE426+CL (4 cr.) ELECT1 (3 cr.) ETE499A (1.5 cr.)	ELECT2 (3 cr.) ELECT3 (3 cr.) OPEN ELECT (3 cr.) ETE499B (1.5 cr.) ETE498R (0 cr.)

Advising and Registration

- **Undergraduate advisor**

- You will be assigned an EECS faculty as your undergraduate advisor
- Advisor will guide you throughout your NSU life for:
 - Course selection and advising
 - Academic and administrative advise
 - Career development
 - Emotional Support

- Beginning of each semester, Students **must complete their on-line course advising** to add/drop course registration
- Please make applicable **tuition/fees payment** arrangement as required by NSU

Steps to follow:

Advising (partially done) → Accounting (verification) → Goto Bank to pay the amount → Come back to Registration with payment slip → "You are now OK"

- Students who advised for current semester but do not officially drop the semester will have to pay full amount before advising in the next semester.
- Please follow academic calendars as announced by NSU authority



Academic Calendar



Description	Update Date
Academic Calendar – Spring 2023	11-Jan-2023
Academic Calendar – Fall 2022	10-Oct-2022
Academic Calendar – Summer 2022	08-May-2022

Spring 2023

Date	Day	Event
7-Jan-23	Saturday	Last day of grade submission (Fall 2022)
15-Jan-23	Sunday	Online course registration for regular and probation students of Spring 2023: BEGINS Online course add / drop / section change: BEGINS
19-Jan-23	Thursday	Online course registration for regular and probation students of Spring 2023: ENDS Online course add / drop / section change: ENDS
21-Jan-23	Saturday	On campus course registration for newly admitted students of Spring 2023 Last day of section cancellation and merging
23-Jan-23	Monday	Orientation program for newly admitted undergraduate students of Spring 2023
24-Jan-23	Tuesday	Classes begin (Spring 2023) Payment of tuition fee: BEGINS
2-Feb-23	Thursday	Last day of online drop of courses with 100% refund (when tuition fee fully paid)
13-Feb-23	Monday	Last day of online drop of courses with 50% refund (when tuition fee fully paid)
21-Feb-23	Tuesday	<i>Holiday- Martyrs Day & International Mother Language Day</i>
6-Mar-23	Monday	Last day of payment of 1st installment (50% of tuition fee) Last day of online drop of courses with 0% refund and "W" grade (when tuition fee fully paid)
7-Mar-23	Tuesday	Payment of tuition with late fee of Tk. 2,000/-: BEGINS
8-Mar-23	Wednesday	<i>Holiday- Shab-e-Barat</i>
17-Mar-23	Friday	<i>Holiday- Birthday of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman</i>
26-Mar-23	Sunday	<i>Holiday- Independence Day</i>
14-Apr-23	Friday	<i>Holiday- Bangla New Year</i>

How Final Grade Calculated?

- Attendance \approx 5%
- Assignments \approx 5%
- Quizzes (3~4) \approx 20%
- Mid Term Examination \approx 30%
- Projects/Research Papers/Presentations \approx 20%
- Lab Performance \approx 20%
- Final Exam \approx 40%

YOU NEED TO WORK HARD THROUGHOUT A SEMESTER!

Grading System

NSU follows international standard of Letter grading system

Numerical Scores	Letter Grade	Grade Points Per Credit
93 and above	A Excellent	4.0
90 – 92	A-	3.7
87 – 89	B+	3.3
83 – 86	B Good	3.0
80 – 82	B-	2.7
77 – 79	C+	2.3
73 – 76	C Average	2.0
70 – 72	C-	1.7
67 – 69	D+	1.3
60 – 66	D Poor	1.0
Below 60	F* Failure	0.0
	I** Incomplete	0.0
	W** Withdrawal	0.0
	X** Continuation	0.0

How to calculate Cumulative Grade Point Average (CGPA)

- Students' grade-point averages are numerical values obtained by dividing the total grade points earned by the credits attempted.
- Only courses' graded A, A-, B+, B, B-, C+, C, C-, D+, D, and F are used to determine credits attempted.

Letter Grade	Grade Point	Course Credit	Point
A	4.0	3.0	$4.0 * 3.0 = 12.0$
A-	3.7	3.0	$3.7 * 3.0 = 11.1$
B+	3.3	2.0	$3.3 * 2.0 = 6.6$

Total point earned : $12.0 + 11.1 + 6.6 = 29.7$

Total credit completed: $3 + 3 + 2 = 8.0$

Grade Point Average (GPA) is $29.7/8.0 = 3.71$

Accident May Happen!!

- **Probation:**

- ✖ Students with a GPA below 2.00 are placed on probation

1st probation – Yellow Warning

2nd probation – Orange Warning

3rd probation – Red Warning

4th Probation - Dismissed



- ✖ NSU students who have been dismissed from the University may apply for readmission with some terms

**You must retake
courses with F or
very Low Grades**

- **Help is Ready – DO NOT FEEL SHY !!!**

- ✓ We are always ready to help you through
 - Academic counseling
 - Personal advice
- ✓ NSU Counseling Center (SAC - 4th floor) can be a great help for emotional support



Students' Engagement

- **ECE students are involved in different professional organization and societies such as IEEE & ACM**

- IEEE NSU Student Branch
- IEEE RAS SC
- IEEE PES SC
- IEEE NSU WIE
- IEEE NSU IAS
- ACM Student Chapter
- NSU ACM-W Student Chapter
- NSU ACM SIGAPP Student Chapter

- **Students are also engaged various extra-curricular and social activities through student clubs, such as**



INSB Receiving IEEE R-10 exemplary student branch award-2018

1. Art & Photography Club
2. Computer & Engineering Club

1. Earth Club
2. Public Health & Sciences Club
3. Pharmaceutical Club

1. Communications Club
2. Ethics and Diversity Club
3. Law and Mooting Society
4. Model UN Club

1. Finance Club
2. Human Resources Club
3. Marketing Club
4. MBA Club
5. Young Economists Forum
6. Young Entrepreneurs Society

1. Athletics Club
2. Cine & Drama Club
3. Debate Club
4. Sangskritik Sangathan
5. Social Services Club

Technical Segments

IEEE
NSU STUDENT
C H



Electrathon



Playing with Pixels
(Image Processing &
Computer Vision)



Python Workshop



IoT for Tomorrow

Student Professional Awareness Conference
(SPAC)



IEEE PES, IEEE RAS for Kids (Humanitarian Event)





Gaming Contest



Hour of Code-2018



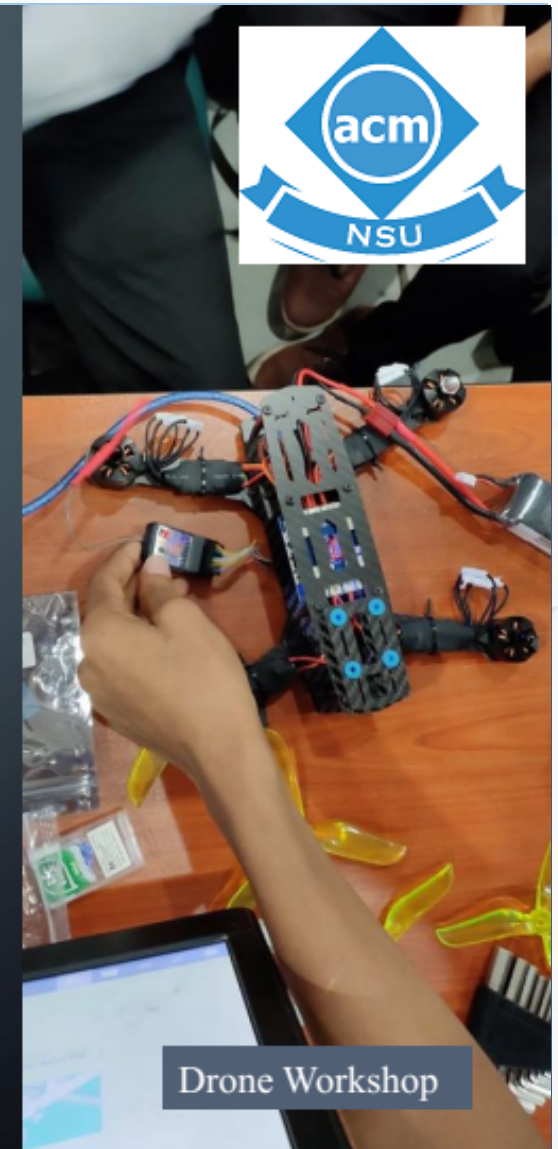
Linux Workshop



Innovation Challenge Season 7



HackNSU-2019



Drone Workshop



Sports



Art and Cultural



Social Services

Blood Donation



Eid Gift to Needy



Winter Cloth Distribution



Annual Doa Mahfil



Against the Drug and Smoke



Sharing Iftar



On National Days



এন.এস.ইউ এর বুকে বাংলাদেশ



A human map created by NSU students





Learning gets better with sharing.



“Success is not final; failure is not fatal; it is the courage to continue that counts.”

Winston Churchill

নাহিদা সুলতানার (১৯)



মোটরসাইকেলে বাসের ধাক্কা, বিশ্ববিদ্যালয় ছাত্রীর মৃত্যু 22 Jan 2023

নাদিরা তার বন্ধুর মোটরসাইকেলে ছিলেন। যমুনা ফিউচার পার্কের সামনে ভিষ্টর পরিবহনের একটি বাস তাদের মোটরসাইকেলকে ধাক্কা দেয়।



A photograph of the North South University building, a large brick structure with a central archway and columns. The university's name is inscribed on the upper part of the building. A blue banner with the text "Thank you!" is overlaid on the image.

NORTH SOUTH UNIVERSITY

Thank you!