

North South University (NSU) is the first private university in Bangladesh, established in 1992. It's one of the top-ranked private universities in the country, known for its strong academic programs, modern campus, and well-qualified faculty.

NSU offers a variety of undergraduate and graduate programs across different schools, including:

- **School of Business & Economics** (BBA, MBA, Economics, Finance, etc.)
- **School of Engineering & Physical Sciences** (CSE, EEE, Architecture, etc.)
- **School of Humanities & Social Sciences** (English, Law, Media, etc.)
- **School of Health Sciences** (Pharmacy, Public Health, Biochemistry, etc.)

It has a strong reputation for research, industry collaborations, and student activities. The campus is in **Bashundhara, Dhaka**, and is one of the most modern in Bangladesh.

### **School of Engineering & Physical Sciences (SEPS) at North South University (NSU)**

#### **Overview**

The **School of Engineering & Physical Sciences (SEPS)** at **North South University (NSU)** is one of the most prestigious academic units of the university. It is dedicated to providing high-quality education and research opportunities in the fields of **Computer Science and Engineering (CSE), Electrical and Electronic Engineering (EEE), and Architecture**. With a strong emphasis on technological innovation, problem-solving, and hands-on experience, SEPS prepares students for careers in academia, industry, and entrepreneurship.

SEPS offers **undergraduate and graduate programs** that align with international academic standards. The school is equipped with modern laboratories, research centers, and a highly qualified faculty, ensuring a dynamic learning environment.

## **Department of Computer Science and Engineering (CSE)**

#### **Introduction**

The **Department of Computer Science and Engineering (CSE)** is one of the flagship departments at NSU, attracting the highest number of students each year. The department

is committed to excellence in **computer science education, research, and innovation**. It provides a broad foundation in computing principles while also offering specialized courses in areas such as **artificial intelligence (AI), cybersecurity, software engineering, data science, and cloud computing**.

## Programs Offered

- **Bachelor of Science in Computer Science and Engineering (BSc in CSE)**
- **Master of Science in Computer Science and Engineering (MSc in CSE)**
- **Ph.D. in Computer Science and Engineering** (planned for future expansion)

## Curriculum & Specializations

The **BSc in CSE** program follows a curriculum that balances **theoretical knowledge** with **practical applications**. Key subjects include:

- Programming and Data Structures
- Database Systems
- Artificial Intelligence and Machine Learning
- Software Engineering
- Web Development and Mobile Applications
- Cybersecurity
- Internet of Things (IoT)

The department also encourages **internships, industry collaborations, and research projects** to prepare students for professional careers in IT and software development.

## Facilities & Labs

- **Programming & Algorithm Lab**
- **AI & Machine Learning Lab**
- **Cybersecurity Lab**
- **Robotics & IoT Lab**
- **High-Performance Computing (HPC) Lab**

## Research & Industry Collaborations

The department actively engages in research projects funded by both **local and international organizations**. Many faculty members have collaborations with **Google, Microsoft, IBM, and other global tech companies**. NSU CSE students also participate in **coding competitions, hackathons, and international research conferences**.

## Career Opportunities

Graduates of CSE from NSU have gone on to work for **leading software firms, multinational tech companies, and start their own ventures**. Some notable career paths include:

- Software Developer / Engineer
- Data Scientist
- AI/ML Specialist
- Cybersecurity Analyst
- Cloud Computing Engineer

## Department of Electrical and Electronic Engineering (EEE)

### Introduction

The **Department of Electrical and Electronic Engineering (EEE)** at NSU is dedicated to producing engineers with expertise in modern electrical and electronic systems. The department provides a rigorous academic framework combined with hands-on experience in **circuit design, embedded systems, telecommunications, power systems, and renewable energy technologies**.

### Programs Offered

- **Bachelor of Science in Electrical and Electronic Engineering (BSc in EEE)**
- **Master of Science in Electrical and Electronic Engineering (MSc in EEE)**

## Curriculum & Specializations

The **BSc in EEE** program covers a broad range of topics, including:

- Electrical Circuits and Systems
- Digital Signal Processing
- Semiconductor Devices
- Renewable Energy and Power Systems
- Microcontrollers and Embedded Systems
- Wireless Communication

Students can choose elective courses that align with their career goals, such as **power engineering, embedded systems, AI in electronics, and optical communications**.

## Facilities & Labs

- **Electronics & Circuit Lab**
- **Power Systems Lab**
- **Control Systems & Robotics Lab**
- **Communication & Signal Processing Lab**

## Research & Industry Collaborations

NSU's EEE department collaborates with **national power companies, telecommunication firms, and multinational electronics manufacturers**. Faculty and students are involved in research projects focusing on **renewable energy, automation, and smart grid technologies**.

## Career Opportunities

Graduates from the EEE department pursue careers in:

- Electrical and Power Engineering
- Telecommunications & Network Engineering
- Embedded Systems Development
- Research and Academia
- Renewable Energy Consultancy

# Department of Architecture

## Introduction

The **Department of Architecture** at NSU provides an innovative curriculum that integrates **design thinking, sustainability, and technology**. The program blends **theoretical learning** with **hands-on studio projects**, preparing students to become future architects who can shape urban landscapes with innovative and sustainable designs.

## Programs Offered

- **Bachelor of Architecture (B.Arch.)** (a five-year professional degree program)

## Curriculum & Specializations

The Architecture program includes core courses in:

- Architectural Design and Theory
- Urban Planning & Sustainable Development
- Construction Materials & Structural Engineering
- Interior & Landscape Design
- Computational Design & 3D Visualization

Students work on **real-world projects** and receive mentorship from leading architects. The program emphasizes **design innovation, cultural heritage conservation, and sustainable architecture**.

## Facilities & Labs

- **Architecture Design Studios**
- **Material & Construction Labs**
- **3D Visualization & CAD Lab**
- **Sustainable Architecture Lab**

## Research & Industry Collaborations

The department collaborates with leading **architectural firms, urban planning agencies, and government bodies**. Students participate in **design competitions, international exhibitions, and research projects on sustainable development**.

## Career Opportunities

Graduates from the **Architecture program** find career opportunities in:

- Architectural Firms
- Urban Planning & Design Consultancy
- Interior Design
- Sustainable Development Projects
- Research & Academia

The **School of Engineering & Physical Sciences (SEPS)** at **North South University (NSU)** is a hub of innovation and academic excellence. With world-class faculty, modern facilities, and a commitment to research and industry collaboration, SEPS equips students with the knowledge and skills required to excel in the global job market. Whether in **Computer Science, Electrical Engineering, or Architecture**, students at NSU benefit from an education that is both **rigorous and relevant** to modern technological advancements.

For prospective students looking for a **challenging yet rewarding** academic experience, SEPS at NSU offers the perfect platform to build a **successful career in engineering and technology**.