

CSE



Department of COMPUTER SCIENCE & ENGINEERING

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World University of Bangladesh

ESTABLISHED IN 2003

The University is approved and recognized by the Ministry of Education, Government of the People's Republic of Bangladesh and the University Grants Commission (UGC) of Bangladesh. It is a leading university for utilitarian education. The University has produced as many as 12000 graduates in its eleven departments covering twenty five programs. None of its degree holders are unemployed implying its commitment to offer up to-date and quality education.

The vision of the University is to create leaders who will make their brain the tiniest laboratory capable of making enormous contributions to economic emancipation and social well-being.

Department of Computer Science and Engineering (CSE):

The Department of Computer Science and Engineering was established in 2003 under the Faculty of Engineering with day and evening programs. In the last 4 convocations 958 students have been awarded B.Sc. Engineering degree from this department who are demonstrating their potentiality home and abroad.

The CSE Department is dedicated to the advancement of learning and is committed to promote research in all fields of knowledge. Both faculty members and students are regularly publishing their research results in peer reviewed journals. Besides that the department is very keen to disseminate real life industry experience to its students. Further the Department regularly arranges CSE festival, programming contests, seminars, workshops etc. for the students.

At present there are two programs being offered under the department of Computer Science & Engineering (CSE). One such is B.Sc. in Computer Science & Engineering (Regular) program which is available for the students with Higher Secondary Certificate (HSC). Another program is B.Sc. in Computer Science & Engineering (Diploma) which is available for the students with a diploma degree.

Goals: The goals of this program are to prepare graduates in some specialized areas of computer science and engineering as well as for jobs in industrial, business or government. The goals also combine a scientific mindset with specialist technical knowledge, enabling graduates to analyze, design, validate and implement state-of-the-art technology in their operational context. It also targets the graduates to take a scientific, ethical and socially responsible approach in conducting and contributing to research in their specific areas of study so that they can cope up with international trends and latest technologies.



Some Achievements of CSE Department:

- (1) A Student Project became Champion in the Project Showcasing Segment at DUITs Campus IT Fest-2015 Organized by University of Dhaka .
- (2) Bayezid Bostami Sony, a student of this department won the prestigious German government scholarship 'DAAD' in 2016.
- (3) Two of the projects developed by the WUB students won the Best Project Award in country's first IoT conference arranged by Bangladesh Innovation Forum in 2016.

Credit Hours & Duration: 150 credit hours (Duration 4 years approximately) for regular students

Admission Requirements: 2nd Division or GPA of 2.50 in S.S.C and H.S.C separately or total GPA 6.00 with minimum GPA 2.00 either in S.S.C or in H.S.C or total GPA 5.00 in SSC & HSC for wards of the freedom fighters for mediams 5' 0 Level and 2' A Level are also acceptable. Diploma holders are also admitted with waiver of courses.

Admission Requirements for Diploma Engineers:

Diploma in Computer Science, Computing, CIS, CSE, Information Technology, Software Engineering or Related disciplines

Course Structure

Semester 1:

Course Name	Credit Hours
Functional English	3
Physics-I	3
Computer Fundamentals	3
Computer Fundamentals Lab	1.5
Bangladesh Studies	2

Semester 2:

Course Name	Credit Hours
Introduction to Programming	3
Introduction to Programming Lab	1.5
Professional Communication	2
Differential & Integral Calculus	3
Physics-II	3
Physics-II Lab	1

Semester 3:

Course Name	Credit Hours
Data Structure	3
Data Structure Lab	1
Chemistry	3
Chemistry Lab	1
Bengali Language	2
Ordinary & Partial Differential Equation	3

Semester 4:

Course Name	Credit Hours
Object Oriented Programming	3
Object Oriented Programming Lab	1.5
Electrical Circuit	3
Electrical Circuit Lab	1.5
Matrix & Vector	3

Semester 5:

Course Name	Credit Hours
Computer Algorithms	3
Computer Algorithms Lab	1
Introduction to Business	3
Basic Statistics	3
Electronic Devices & Circuits	3
Electronic Devices Circuits Lab	1.5

Semester 6:

Course Name	Credit Hours
Principles of Sociology	3
Web Technologies and programming	3
Web Technologies and programming Lab	1.5
Discrete Math	3
Digital Logic Design	3
Digital Logic Design Lab	1

Semester 7:

Course Name	Credit Hours
Operating System	3
Operating System Lab	1
Database Management Concepts	3
Database Management Concepts Lab	1
International Relation	2
Principles of Accounting	3

Semester 8:

Course Name	Credit Hours
System Analysis and Design	3
System Analysis and Design Lab	1
Microprocessor and Assembly Language	3
Microprocessor and Assembly Language Lab	1
Software Engineering	3
Software Engineering Lab	1
History of South Asia	2

Semester 9:

Course Name	Credit Hours
Data communications & Networking	3
Data communications & Networking Lab	1
Numerical Methods	3
Engineering Drawing	2
Engineering Drawing Lab	1

Semester 10:

Course Name	Credit Hours
Theory of Computing	3
Computer Graphics	3
Computer Graphics Lab	1
Computer Architecture & Organization	3
Option A	4



Semester 11:

Course Code	Course Name	Credit Hours
CSE 905	Compiler Design	3
CSE 906	Compiler Design Lab	1
	Computer and Cyber Security	3
	Option B	4

Semester 12:

Course Code	Course Name	Credit Hours
CSE 1201	Project / Internship / Thesis Report & Defense/ Dissertation	6

Option A (Any one course):

Course Code	Course Name	Credit Hours
CSE 1015	Network Security	3
CSE 1016	Network Security Lab	1
CSE 1009	Simulation and Modeling	3
CSE 1010	Simulation and Modeling Lab	1
CSE 1011	Data Warehouse and Data Mining	3
CSE 1012	Data Warehouse and Data Mining Lab	1
CSE 1013	Digital Image Processing	3
CSE 1014	Digital Image Processing Lab	1

Option B (any one course):

Course Code	Course Name	Credit Hours
CSE 1110	Artificial Intelligence & Neural Networks	3
CSE 1111	Artificial Intelligence & Neural Networks Lab	1
CSE 1114	Digital signal processing	3
CSE 1115	Digital signal processing Lab	1
CSE 1108	VLSI Design	3
CSE 1109	VLSI Design Lab	1
CSE 1116	Pattern Recognition	3
CSE 1117	Pattern Recognition Lab	1

Course Waiver: Candidates beyond 12 years of education, may be exempted from some courses.

On earning a CSE degree students acquire the following skills:



Career Opportunities:

- | | | |
|-----------------------|-----------------------------------|-------------------------------------|
| (1) Software Engineer | (7) System Administrator | (13) CRM Technical Developers |
| (2) System analyst | (8) Database Administrator | (14) Project Manager |
| (3) System Designer | (9) Mobile Apps Developer | (15) Applications Developer |
| (4) System Developer | (10) Database Analyst and Similar | (16) Business Intelligence Analyst |
| (5) Web Developer | (11) Hardware Engineers | (17) Information Technology Auditor |
| (6) Web Designer | (12) Business System Analyst | (18) Database Manager |



Credit Transfers/Exemptions:

Students can transfer credits to World University of Bangladesh provided that they can submit evidence of previous credits completed at a recognized universities or university Colleges of any commonwealth country. Moreover, students with HNC, HND and Diploma from the BTEB or any recognized examination bodies will be given necessary credit exemptions so that they can complete their courses in a shorter period.



Class Timing: Morning, Day & Evening courses are available. However, evening classes are meant for employed persons.

Collaboration : Collaboration with universities is USA, UK, Germany, China, Australia , Japan ,Italy, Russia, Latvia , Portugal, Malaysia, Phillippines, Vietnam, Malawi, Uganda, Iraq, Iran, Spain, Swizerland, Puerto Rico, Georgia, South Africa, Nigeria, Kazakhstan, Palestine and many more List of Partner Universities at http://www.wub.edu.bd/international_students/partners_international_affairs



Alumni Relations : The aim of the CSE Alumni Association is to build an interactive strong WUB community around the world. Alumni are the number one priority for the university and the university helps them to engage with all the current students, develop their professional growth, and assist them to conjoin with other alumni of the association. The university always welcomes the association to organize professional events and annual homecoming program for all the members of the family where a bridge can be created between the current and former students to build up a bigger community around the world.





World University of Bangladesh (WUB) at a glance -

- * A magnificent new Campus
- * A supportive Learning Environment
- * A fully comprehensive University
- * 300 Faculty members and staff
- * International Recognition
- * 11 Departments, 25 day & evening programs
- * 5000 total students enrolled
- * More than 12,000 alumni
- * Active clubs - 15 * Lab 40
- * 4 Convocation Concluded

Academic Session : The courses are run by semester system, each year consist of 3 semesters. Spring (Jan-Apr), Summer (May-Aug) and Fall (Sep-Dec) Semester.

Admission Procedure : Apply online or by physical presence; submit all relevant papers and documents; sir for admission test if your total of CGPA in SSC and HSC is below seven; alternatively you have to face viva-voce; obtain a positive instruction and make payments.

FINANCIAL AID : WUB provides a number of scholarships and financial grant to the deserving students to meet their tuition fees . To be considered for this Scholarship, a student must achieve for both SSC and HSC (or its equivalents): Golden GPA-5.00=100%, GPA-5 (1 Golden)= 80%, Normal GPA-5=70%, GPA 4.26-4.99=45%, GPA-3.5-4.25=35%, GPA 3.00-3.49=25% and GPA 2.50-2.99=20%. Special scholarship for female students, siblings, spouse, athletes, group and many other. Best performers of each semester will enjoy full free scholarship for that semester.

International Affairs Division

For information regarding the Section's activities, please refer to the following link:
http://www.wub.edu.bd/international_students/overview

Companies that Hire WUB's Graduates

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|---------------------------------|-----------------------|----------------------|
| ■ Ministry of Shipping | ■ Kyushu University | ■ Sonali Bank Ltd |
| ■ Bank Asia | ■ IPvision Inc Canada | ■ City Bank Ltd |
| ■ Bengal Group | ■ National Bank Ltd | ■ Southeast Bank Ltd |
| ■ Eastern Bank Ltd | ■ Nitol Motors Ltd | ■ Uattra Motors Ltd |
| ■ Xiaomi Bangladesh | ■ NRB Bank | ■ Grameen Phone |
| ■ IFIC Bank Ltd | ■ Prime Bank Ltd | ■ Banglalink |
| ■ Hyper International Ltd | ■ Pubali Bank Ltd | ■ Agrani Bank Ltd\ |
| ■ Technische Universitat Berlin | ■ EnerGaia Co. Ltd | ■ Pacific Group |





Distinguished Faculty Members of the Department:

Full time & Adjunct

Saiful Islam, PhD	Professor
M. Nurul Islam, Ph.D.	Professor
M.A. awal, M.Sc. (DU), M.Sc. (England)	Professor
Kazi Hassan Robin, B.Sc. Engg., M.Sc. in IT (UK)	Associate Professor & Head of the Dept.
Afzal Hossain, B.Sc.Engg. (MIT), M.Sc. in IT (DU)	Asst. Professor
Dr. Md. Riyad Tanshen, B.Sc.Engg., M.Sc., Ph.D. (South Korea)	Asst. Professor
Md. Ashraf Kamal, B.Sc.Engg., M.Sc.Engg. in ASM (Australia)	Senior Lecturer
Ayesha Siddika, B.Sc. Engg., M.Sc.Engg. (UAP)	Senior Lecturer
Mithun Kumar PK, B.Sc.Engg., M.Sc. Engg.(MBSTU)	Senior Lecturer
Md. Ashiqur Rahman, B.Sc.Engg., M.Sc. Engg.(UK), MBA	Senior Lecturer
Shamsun Nahar, B.Sc. Engg.(IIUC), M.Sc. Engg.(UIU), MBA	Senior Lecturer
Ahsan Ullah, B.Sc.Engg., M.Sc.Engg. (UK)	Senior Lecturer
Md. Faizul Huq, B.Sc.Engg. (MBSTU), MIT (DU)	Lecturer
Mst. Nishita Akter, B.Sc. Engg.(BUBT), M.Sc. Engg.(JU)	Lecturer
Ratna Mudi, B.Sc. Engg.(UAP), M.Sc. Engg.(JU)	Lecturer
Md. Nazmus Sakib, B.Sc. Engg., M.Sc. Engg.(Malaysia)	Lecturer
Suriya Sarker, B.Sc.Engg., M.Sc. Engg.(CUET)	Lecturer
Y.A. Joarder, B.Sc.,Engg. M.Sc. Engg.(IU)	Lecturer
Md. Delwar Hossain, B.Sc.Engg. M.Sc. Engg.(JU)	Lecturer
Nadira Islam, B.Sc. Engg.Engg, M.Sc. Engg.(DU)	Lecturer
Shalah Uddin Perbhez Shakil, B.Sc. Engg. (PUST), M.Sc. Engg.(DUET)	Lecturer
Aakib Bin Nesar , B.Sc.Engg. (UIU), M.Sc. Engg.(UK)	Lecturer
Amirul Islam, B.Sc.Engg. (JU), M.Sc. Engg.(JU)	Lecturer
Kh. Mustafizur Rahman, B.Sc.Engg., MISS (BUP)	Lecturer
Faisal Ahmed, BA (Hons.), MA (UK)	Lecturer
Nabila Ahsan, BA (Hons.) MA (UK)	Lecturer
Mourin Barua, BA (Hons.), MA (DU), M.Phil (UK)	Lecturer
Md. Ashikur Rahman, B.Sc. Engg., M.Sc. Engg (UK), MBA	Lecturer



Vice-Chancellor

Professor Dr. Abdul Mannan Choudhury

MBA (Manchester-Business School), PhD (London)

Formerly ; Selection Grade Professor of DU

Chairman, Dept. of Management, DU

Academic Dean; Bayero University, Kano, Nigeria

Director, EMBA, & Chairman, Department of Management, DU

Proctor DU; Provost, S.M. Hall (DU)

Founder Chairman, MIS Dept. DU



Mr. Mostafa Jabbar, Minister, Ministry of Post and Telecommunication along with the Advisor, Vice Chancellor and Treasurer of the World University of Bangladesh, inaugurates the CSE Festival.

Permanent Campus

:Avenue 06 Road and Lake Drive Road, Sector # 17/H
Uttara, Dhaka- 1230, Cell: 01955384008

Admission, Information & Pick Up Points:

: Plot No. 14, Lake Drive Road, Sector #7, Dhaka- 1230,
Cell: 01783651567, 01879542572

: Plot # 3/A, Road # 4, Dhanmondi, Dhaka- 1205,
Tel. 9611410-3/Ext-111, 112, Cell: 01752102855

: 151/8, Green Road, Dhanmondi, Dhaka- 1205



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