

B.Sc. in **Civil** Engineering



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World University of Bangladesh (WUB)

The University is approved and recognized by the Ministry of Educa-ESTABLISHED IN 2003 tion, 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.

About Civil Engineering Department

The field of Civil Engineering is very wide, probably the widest of all the Engineering disciplines. Almost all the physical infrastructural developments of the country are the products of Civil Engineering. Construction, operation and maintenance of buildings, bridges, roads, railways, airports, embankment, river training, irrigation canals, sea and river ports, power houses, transmission towers, dams and barrages etc. require the knowledge and technology of Civil Engineering.

Design & construction of a cradle for a baby and digging a grave for the dead require proper knowledge of Civil Engineering. As such it is said that necessity of Civil Engineering extends from cradle to grave. It can reasonably be stated that the activities of Civil Engineering started at the very beginning of civilization and will end with the "Big Destruction" of the globe.

All the requisite subjects of Civil Engineering are taught in WUB built on the course curricula of BUET and other developed nations. Experienced and learned teachers teach the courses. WUB is well equipped with the necessary lab facilities for test and research works.

One who wants to be a graduate in Civil Engineering is welcome to get admitted in WUB in the department of Civil Engineering.





Top Careers in Bangladesh

Civil engineers can pave a successful career for themselves in both governmental and private organizations. Top government jobs are in the

- Public Works Department,
- Roads and Highways Department,
- Railway,
- Public Health Engineering,
- Local Government Engineering Department,

There are great career opportunities in private & public sector banks, as well as the World Bank, and the Asian Development as Procurement Specialists. And needless to say, real estate is another sector with plenty of opportunities and scope for career growth for civil engineers in Bangladesh.

Objectives:

• Enabling the individual to contribute to the field of construction and infrastructure development.

• Making the graduates skilled in taking the responsibility for development of housing and standard of living

Credit Hours & Duration :

Minimum 160 Credit hours (Duration 4 years).

Admission Requirements :

2nd Division or GPA of 2.50 in S.S.0 & H S.O separately or total GPA of 6.00 with minimum GPA of 2.00 either in S.S.C or in H.S.O or total GPA of 5.00 in S.S.O & H.S.O for wards of the freedom fighters or minimum 5' O Level, 2' A Level courses or Equivalent. Diploma holders are also admitted with waiver of courses.

Admission Requirements for Diploma Engineers :

Diploma in Civil or Structural Engineering or related disciplines & Diploma in Architecture

Civil Engineering Laboratories:

The department has the following well equipped laboratories which provide practical instruction to undergraduate students and facilities for post-graduate training, research work and consultancy work.

- Concrete Lab
- Computational Lab
- Environmental Engineering Lab
- Geotechnical Engineering Lab
- Highway Engineering Lab
- Hydraulics Lab
- Structural Engineering Lab
- Survey Lab
- Transportation Lab

Course Structure of Civil

Level 1; Term I

| Course Name | Credit Hours |
|---|-----------------|
| Physics | 3 |
| Physics II Lab | 1 |
| Differential and Integral Calculus | 3 |
| Chemistry | 3 |
| Chemistry Lab: Inorganic Quantitative Analysis | 1 |
| English | 3 |

Levell; Term II

| Course Name | Credit Hours |
|-----------------------------|-----------------|
| Civil Engineering Drawing-I | 1 |
| Physics III | 3 |
| Engineering Mechanics | 3 |
| Basic Electrical Technology | 3 |
| Bangladesh Studies | 2 |
| Bangla Literature | 2 |

Level 1; TerillI

| Course Name | Hours |
|---|-------|
| Economics | 3 |
| Matrices and Three Dimensional Coordinate Geometry | 3 |
| Civil Engineering Drawing II | 1 |
| Surveying | 3 |
| Basic Electrical Technology Lab | 1 |
| Field Surveying | 1 |

Level 2; Term I

| Course Name | Credit Hours |
|-----------------------------------|-----------------|
| Differential Equations | 3 |
| Sociology | 2 |
| Details of Construction Sessional | 1 |
| Engineering Material | 3 |
| Engineering Materials Lab | 1 |

Level 2; Term II

| Course Name | Credit Hours |
|---|-----------------|
| Engineering Geology & Geomorphology | 3 |
| Mechanics of Solids I | 3 |
| Structural Mechanics & Materials Lab | 1 |
| Principles of Accounting | 3 |
| Advanced English | 3 |

Level 2; Term III

| Course Name | Credit Hours |
|---|-----------------|
| Numerical Methods | 3 |
| Computer Programming & Programming Lab | 2.5 |
| Quantity Surveying | 1 |
| Mechanics of Solids II | 3 |
| Fluid Mechanics | 3 |
| Fluid Mechanics Lab | 1 |

Level 3; Term I

| Course Name | Credit Hours |
|--|-----------------|
| Analysis of Statically Determinate Structures | 3 |
| Analysis and Design of Steel Structures Sessional | 1 |
| Design of Concrete Structures I | 3 |
| Water Supply Engineering | 3 |
| Essentials of Soil Mechanics | 3 |
| Business Communications, Industrial and operational management, Technology entrepreneurship, Business management | 3 |

Level 3; Term II

| Course Name | Credit Hours |
|--|-----------------|
| Water Supply Engineering Sessional | 1 |
| Geotechnical Engineering Sessional I | 1 |
| Open Channel Flow | 3 |
| Analysis of Statically Indeterminate Structures I | 3 |
| Concrete Structure Design I Sessional | 1 |
| Design of Concrete Structure II | 3 |
| International Relations | 3 |

Level 3; Term III

| Course Name | Credit Hours |
|---|-----------------|
| Structural Analysis and Design of Concrete Structures II Sessional | 1 |
| Introduction to Foundation Engineering | 3 |
| Transport and Traffic Design | 2 |
| Hydrology | 3 |
| Waste Water Engineering | 3 |
| Transportation Engineering Sessional I | 1 |

Level 4; Term I

| Course Name | Credit Hours |
|---|-----------------|
| Open Channel Flow Lab | 1 |
| Highway Design | 3 |
| Project Planning & Management | 3 |
| Analysis of Statically Indeterminate Structures II | 3 |
| Irrigation & Flood control | 3 |
| Irrigation & Flood control Sessional | 1 |
| Railways and Transit System | 2 |

Level 4; Term II

| Course Name | Credit Hours |
|---|-----------------|
| Professional Practices and Communication | 3 |
| Pre-stressed Concrete | 3 |
| Analysis of Statically Indeterminate Structures Sessional II | 1 |
| Solid Waste Management | 3 |
| Environmental Engineering Sessional II | 1 |
| Permeability and Seepage | 2 |

Level 4; Term III

| Course Name | Credit Hours |
|---|-----------------|
| Design of Steel Structures | 3 |
| Water Resources Engineering Sessional | 1 |
| Laterally Loaded and Machine Foundations | 2 |
| Thesis / Project | 4.5 |





Course Waiver: Course may be exempted for candidates beyond 12 years of education. Dual major may be offered.

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

Credit Transfer : Students can transfer their credit to the World University of Bangladesh provided they can submit evidence of previous credits completed from a recognized University or University College 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 to enable them to finish their courses in a shorter period.

Alumni Relations :

The aim of the 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.



Collaboration : Collaboration with Universities of 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_aff





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

Academic Session :

The course 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



| SOME OF DISTINGUISHED FACULTY MEMBER | S: |
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|--------------------------------------|----|

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|---|----------------------|
| Professor Irtishad Ahmad, B.Sc. Engg. (BUET), M.Sc. Ph.D, PE (USA) | Advisor |
| Dr. SM Shirazi, CEng, B.Sc.Engg, M.Sc. Engg (BAU), Ph.D. (Japan) | Professor & Head |
| AFM. Abdur Rauf, B.Sc. Engg. (BUET,) M.Engg. (USA) | Professor & Dean |
| M. Sekander Ali, B.Sc. Engg. (BUET), M.Engg (AIT) | Professor |
| Dr. A.S.M. Abdul Awal, B.Sc.(BAU), M.Engg(AIT), M.Sc. (Melborne), Ph.D(Malaysia) | Professor |
| Engr. Rabindra Ranjan Saha, PEng., B.Sc. Engg.(CUET), M.Sc. (UK) | Associate Professor |
| Md. Zahid Husain Khan, B.Sc. Engg., M.Sc. Engg (BUET) | Associate Professor |
| Dr. Md. Manzurul Islam, Ph.D | Adjunct Faculty |
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| Md. Asif Bin Kabir | Lecturer |
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| Md. Hasibul Hasan, B.Sc.Engg. ((UAP), M.Sc.Engg. (Italy) | Lecturer |
| Sudipta Chakraborty, B.Sc.Engg. (AUST), M.Sc.Engg. (BUET) | Lecturer |
| Md. Ashiqur Rahman, B.Sc.Engg. (SUST) | Lecturer |
| Md. Abul Hasanath Ove, B.Sc.Engg. (PU), M.Sc. Engg.(DUET) | Lecturer |
| Md. Hisamuzzaman, B.Sc.Engg.(KUET) M.Sc.Engg.(BUET) | Lecturer |
| Hamidur Rahaman , B.Sc. Engg. (WUB), | Graduate Assistant |
| Md. Tahmidur Rahman Bhuiyan, B.Sc.Engg. (KUET), M.Sc.Engg. (BUET) | Lecturer |
| Shamima Akter, B.Sc. Engg. (IUBAT) | Lecturer |
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| Md. Zahidul Islam, B.Sc.Engg.(IUBAT), M.Sc.Engg.(BUET), MS (JU) | Lecturer |
| Md. Zahidul Islam, B.Sc.Engg.(IUBAT), M.Sc.Engg.(BUET), MS (JU) Md. Tanbir Khan, B.Sc.Engg., M.Sc.Engg.(UAP) | Lecturer Lecturer |



Parmanent Campus at Uttara



Professor Dr. Abdul B.Com (Hons), M.Cc Formerly Selection H.O.D. Dept. of Mar Academic Dean, Bay Director, EMBA, & 🕼 Proctor D.U. Provost, S.M. Hall (D.U.) Founder Chairman, MIS Dept. D.U.



Dr. Tawfiq-E-Elahi Chowdhury, Advisor to the Hon'able Prime Minister picture's with the Vice Chancellor Professor Dr. Abdul Mannan Choudhury, Dr. Musfiq M. Choudhury, Chief Advisor, WUB, Morsheda Choudhury, Treasurer and Dr. M. Nurul Islam, Pro-VC of World University of Bangladesh at an orientation program.



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