

# CSE

## Faculty Members

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Lecturer

CSE Nov. 2017

## B.Sc. (Engg.) in Computer Science & Engineering



B A N G L A D E S H

A University approved by the Government of the People's Republic of Bangladesh  
& the University Grants Commission of Bangladesh.

## Accreditation & Collaboration



www.medu.gov.bd



www.ugc.gov.bd



B A N G L A D E S H



www.acu.ac.uk



www.asac.org.uk

### Credit transfer

Credit transfer to Universities in  
the USA, the UK, Australia, New  
Zealand, Canada and many  
other European Universities is  
available for our undergraduate  
& graduate programmes.

### For Further Information:

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## General Information

The waves of Globalisation of knowledge, its expansion and dissemination have brought a radical shift in the concept of University. A further shift is registered in dismantling the age-old notion that the state alone is to shoulder the burden of tertiary education and accommodating the private universities to share this national duty, of course, without making any compromise in academic excellence and other matrices of university education.

Metropolitan University joins this historic shift to bring quality university education at affordable cost to the doorsteps of the students. Under the leadership of Dr. Toufique Rahman Chowdhury, Founder Chairman, Board of Trustees and with the approval of the Ministry of Education under the Private University Act of 1992 (which was amended in 1998) Metropolitan University came into being or 3rd May 2003. Metropolitan University (MU) is situated in Sylhet, Bangladesh.

## The Programme

The B. Sc. Engineering (CSE) programme is a 48 (forty-eight)-month study of 12 semesters for regular students. A student should complete at least 150 credits to be a graduate. The program is intended for students who want to obtain a sound theoretical and technical knowledge in Computer Science. The job market in Computer Science and Information Technology is robust and growing in a geometric progression in Bangladesh and throughout the world. Over the next several decades, Computer Scientists will continue to reshape our familiar world.

## Admission Requirements

a. Students who have passed SSC and HSC or any equivalent Public Examination with at least two 2nd divisions or minimum GPA 2.5 in each (5.00 scale) may apply for admission. Students who have minimum 2.00 in any one of SSC or HSC and a total of GPA 6.00 may also apply.

b. For English medium students, minimum 05 subjects in O level and 02 subjects in A level examinations are required. At least Grade B or GPA 4.0 in four subjects out of the seven subjects and at least Grade C or GPA 3.5 in the remaining three subjects (A=5, B=4, C=3, D=2 & E=1).

c. The children of Freedom Fighters with a total of GPA 5.0 in both SSC and HSC or in equivalent Public Examination may apply for admission with Freedom Fighter Certificate of the Government.

d. For GED students, UGC guidelines will be followed.

**Total Credit Hours** : 150

**Programme Duration** : 04 Years

**Total Terms** : 12 Terms (Each of 04 months)

## Course

### Core Courses:

CSE 111	Computer Technology
CSE 121 & 122	Structured Programming & Lab
CSE 123 & 124	Basic Electrical Engineering & Lab
CSE 125	Discrete Mathematics
CSE 131 & 132	Basic Electronics Engineering & Lab
CSE 133 & 134	Data Structure & Lab
CSE 200	Project
CSE 211 & 212	Digital Logic Design & Lab
CSE 213	Computer Organization and Architecture
CSE 215	Telecommunication Principles
CSE 221 & 222	Object Oriented Programming & Lab
CSE 223 & 224	Database Management System & Lab
CSE 231 & 232	Algorithm & Lab
CSE 235 & 236	Microprocessor & Assembly Language & Lab
CSE 239	Data Communication
CSE 300	Project
CSE 311 & 312	Computer Networks & Lab
CSE 315 & 315	Computer Peripherals & Interfacing & Lab
CSE 321 & 322	Operating System & Lab
CSE 323 & 324	Web Programming & Lab
CSE 327	Theory of Computation
CSE 415 & 416	Compiler Construction & Lab
CSE 421 & 422	Artificial Intelligence & Lab
CSE 423	Software Engineering
CSE 327	Theory of Computation
CSE 426 & 436	Final Year Project/Thesis

### Science & Mathematics Courses

PHY 111	Physics - I
PHY 124	Physics - II
STA 215	Basic Statistics & Probability
MAT 112	Differential and Integral Calculus
MAT 123	Differential Eq. & Laplace transform.
MAT 135	Matrices, CV & Fourier analysis
MAT 216	Geometry & Vector Analysis
MAT 235	Numerical Methods

### General Education Courses

ENG 114	English Language - I
ENG 115	English Language - II
GED 233	Bangladesh Studies
GED 219	Engineering Economics
GED 321	Accounting
GED 421	Industrial Management
GED 431	Business Communication

### Optional Courses

CSE 331 & 332	Computer Graphics & Multimedia & Lab
CSE 413 & 414	Optical Communication & Lab
CSE 425 & 426	Neural Network & Lab
CSE 431 & 432	VLSI Design & Lab
CSE 441 & 442	Digital Signal Processing & Lab
CSE 443 & 444	Natural Language Processing & Lab
CSE 455 & 456	Contemporary Course on Computer Science & Lab
CSE 465 & 466	Digital Image Processing & Lab
CSE 469 & 470	Bioinformatics Computing & Lab
CSE 471 & 472	Machine Learning & Lab

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