

**Rules and Guidelines**  
*for*  
**The B.Sc. and M.Sc. Engineering Programs**



**Faculty of Engineering and Technology**  
**University of Dhaka**  
**Dhaka-1000, Bangladesh**

**December 2020**

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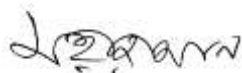
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## Foreword

The B.Sc. and M.Sc. Engineering programs of the Faculty of Engineering and Technology at University of Dhaka are conducted under certain rules and guidelines. A subcommittee was formed to revise the rules and guidelines so that all the departments can adapt it. Based on the valuable discussions and recommendations during several meetings, the subcommittee came up with revised and fine-tuned Rules and Guidelines for the Faculty. These Rules and Guidelines of the Faculty of Engineering and Technology were approved at the Faculty meeting and finally approved by the Academic Council and Syndicate of the University of Dhaka. It is quite imperative that the teachers and the students of this faculty are familiar with these rules and guidelines. I wish that respective faculty members as well as students will be benefited from this Booklet.

I express my sincerest gratitude and thanks to the convener and subcommittee members and my esteemed colleagues for their support and cooperation in successful compilation of this Booklet.



**Dr. Md Hasanuzzaman**

Dean,  
Faculty of Engineering and Technology, and  
Professor, Department of Computer Science and Engineering  
University of Dhaka, Dhaka-1000, Bangladesh

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## 1. About of the Faculty

In accordance with the first ordinance of the Dhaka University Order 1973 and the recommendation of the Academic Council (17/06/2008) and the Syndicate (17/06/2008) followed by approval of the Senate on 26/06/2008, the Faculty of Engineering and Technology was established on 26<sup>th</sup> June 2008, which consisted of the Department of Applied Physics, Electronics and Communication Engineering, Department of Applied Chemistry and Chemical Engineering, and Department of Computer Science and Engineering.

Considering the national demand, this faculty was established to produce skilled manpower in the field of engineering and technology, and the curriculum of this Faculty has been developed to achieve this goal. The Faculty actively promotes industry-based research, use of information technology and global development.

The Department of Nuclear Engineering was established under this faculty through approval of the Syndicate meeting (29<sup>th</sup> August, 2010), with a view to develop Nuclear Scientists capable of taking all sorts of responsibilities of Nuclear power plants and proper uses of Nuclear Energy. This department started M.Sc. Engineering program from 2012-2013 academic session and B.Sc. Engineering program from 2013-2014 academic session. The department of Machatronics Engineering was established under this faculty upon approval in the Syndicate meeting (30<sup>th</sup> September 2014). This department has started its academic activities on September 08, 2015 as a B.Sc. Engineering program from 2015-2016 academic session. After that the department has been renamed as the Department of Robotics and

Mechatronics Engineering on June 21, 2016. The Department of Applied Physics, Electronics and Communication Engineering renamed as Electrical and Electronic Engineering in the Syndicate meeting dated the 30<sup>th</sup> September 2014.

These departments offer undergraduate, Masters, M.Phil. and Ph.D. programs. At present there are more than 132 faculty members and about 1200 students in the five departments. This faculty provides Dean’s Award to the meritorious students every year. The faculty of Engineering and Technology publishes a half-yearly journal named the Journal of Applied Science and Engineering. The faculty is trying to develop well-equipped laboratories for each department. The faculty is organizing an International Conference named Innovation in Engineering and Technology (ICIET) since 2018.

This Faculty determined to maintain a strong relationship with the foreign Universities as well as local industries. The Departments of this Faculty are actively involved in organizing special programs, like seminars, programming contests, workshops, etc. on a regular basis.

## 2. Departments of the Faculty

There are five departments in this faculty. These are Electrical and Electronic Engineering (EEE), Applied Chemistry and Chemical Engineering (ACCE), Computer Science and Engineering (CSE), Nuclear Engineering (NE), Robotics and Mechatronics Engineering (RME).

## 2.1 Electrical and Electronic Engineering

### (a) Brief Introduction

<b>Date of Established:</b>	September 1965
<b>Founder Chairman:</b>	Prof. Shah Md. Fazlur Rahman
<b>Current Chairman:</b>	Prof. Dr. S.M. Mostafa Al Mamun
<b>Number of Faculty Members:</b>	36
<b>Number of Students:</b>	481
<b>Telephone:</b>	9661900 [7340 (Chairman) 7341 (Off.)]
<b>E-mail :</b>	office.eee@du.ac.bd, chair.eee@du.ac.bd
<b>Webpage:</b>	<a href="http://eee.du.ac.bd/">http://eee.du.ac.bd/</a>
<b>Offered Degrees</b>	B.Sc. in Engg., M.Sc. in Engg, and Ph.D.

### (b) Course Credits Summary

SL. No.	Title	Credit		
		B.Sc. Engg.	M.Sc. Engg.	
			Thesis Gr.	Project Gr.
1	Total credits	165	36	36
2	Credits for core courses (theory)	96	24	24
3	Credits for practical courses	33	0	06
4	Credits for general education	15	0	0
5	Credits for mathematics and statistics	15	0	0
6	Credits for projects/field study	06	12	06
7	Credits for course viva	0	0	0

**(c) List of Faculty Members**

<b>Professor</b> Dr. Subrata Kumar Aditya Dr. Md. Adnan Kiber Dr. A.H.M. Asadul Huq Dr. S.M. Mostafa Al Mamun Dr. Anis Ahmed Dr. Md. Habibur Rahman Dr. Md. Shafiul Alam Dr. Z.M. Parvez Sazzad A.S.M. Moslehuddin Dr. Md. Atiqur Rahman Ahad Dr. Saeed Mahmud Ullah Dr. Mosabber Uddin Ahmed	<b>Assistant Professor</b> M.L. Palash Nishatul Majid Subrata Das Ashan Habib A.B.M. Hasan Talukder Md. Minarul Islam Md. Zahidul Islam Dr. Sharnali Islam Dr. Khaleda Ali Dr. Mainul Hossain
<b>Associate Professor</b> Zahirul Hoque Mozumder Dr. Md. Junaebur Rashid Dr. Sazzad M. S.Samaun Imran Dr. Sakhawat Hussain Dr. Abul Kalam Azad Dr. Imtiaz Ahmed	<b>Lecturer</b> Mohiuddin Munna Sheikh Md. Mahmudul Islam Miftahul Jannat Rasna Mohammad Nowaz Rabbani Chowdhury Ariful Islam Md. Mahmud-Ul-Tarik Chowdhury Md. Didarul Alam Marshia Zaman Shaily

**(d) Major Research Areas**

Microwaves and Antenna, Optical Fiber Communications, Signal and Image Processing, Material Science and Engineering, Semiconductor and VLSI Technology, Computer Networks, Nanoscience and Technology, Biomedical Engineering, Renewable Energy Technology, Industrial Automation and Power Electronics, Power Systems, Microprocessor and Embedded Systems, Robotics and Control Engineering.

**2.2 Applied Chemistry and Chemical Engineering****(a) Brief Introduction**

<b>Date of Established:</b>	14 <sup>th</sup> August 1972
<b>Founder Chairman:</b>	Dr. Syed Shah Mohammad Ashfaque Khorasani Al-Quaderi
<b>Current Chairman:</b>	Prof. Dr. Dipti Saha
<b>Number of Faculty Members:</b>	37
<b>Number of Students:</b>	370
<b>Telephone :</b>	9661900 [Ext. 7380 (Chairman) 7381 (Off.)]
<b>E-mail :</b>	acce@du.ac.bd,acce@univdhaka.edu
<b>Webpage:</b>	<a href="http://www.du.ac.bd/academic/department_item/ACT">http://www.du.ac.bd/academic/department_item/ACT</a>
<b>Offered Degrees</b>	B.Sc. in Engg, M.Sc. in Engg., M.Phil. and Ph.D.

**(b) Course Credits Summary**

SL. No.	Title	Credit	
		B.Sc. Engg.	M.Sc. Engg.
1	Total Credits	163	40
2	Credits for core courses (theory)	102	24
3	Credits for practical courses	28.5	10
4	Credits for general education	0	0
5	Credits for mathematics and physics	18	0
6	Credits for projects/ field study	10.5	04
7	Credits for course viva	04	02

**(c) List of Faculty Members**

<b>Professor</b>	Dr. Mohammad Ismail
Dr. Rafiqul Islam	Dr. Mithun Sarker
Dr. Md. Abdul Quaiyyum	Ms. Taslima Ferdous
Dr. A. M. Sarwaruddin Chowdhury	Dr. Md. Nuruzzaman Khan
Dr. Sayed Md. Shamsuddin	Dr. Sumaya Farhana Kabir
Dr. Md. Nurul Amin	Dr. Abul Khayer Mallik
Dr. Dipti Saha	<b>Assistant Professor</b>
Dr. Md. Nurnabi	Taslim Ur Rashid
Dr. A.N.M. Hamidul Kabir	Asaduzzaman
Dr. Md. Zahangir Alam	Sadia Sharmeen
Dr. Mohammad Mizanur Rahman	Md. Shirajur Rahman
Dr. Ashequl Alam Rana	Md. Sazedul Islam
Dr. Mohammad Kamruzzaman	Dr. Mohammad Shahruzzaman
Dr. A. F. M. Mustafizur Rahman	Shanta Biswas
Dr. Mohammad Mainul Karim	Md. Minhajul Islam
Dr. Md. Ashaduzzaman	Shaikat Chandra Dey
Dr. Shah Md. Masum	Tanvir Ahmed
<b>Associate Professor</b>	<b>Lecturer</b>
Dr. Papia Haque	Khandoker Samaher Salem
Dr. Md. Ashraful Islam Molla	Md. Nurus Sakib

**(d) Major Research Areas**

Petroleum and Petrochemicals, Chemical Technology, Polymer Science, Analytical and Environmental Chemistry, Organic Chemistry, Chemical Processing Technology, Energy Technology and Natural Product Chemistry, Atmospheric Chemistry, Photochemistry, Carbohydrate Chemistry, Science of Materials, Petroleum Mining and Industrial Management, Petrochemicals.

**2.3 Computer Science and Engineering****(a) Brief Introduction**

<b>Date of Established:</b>	1 <sup>st</sup> September, 1992
<b>Founder Chairman:</b>	Prof. Dr. M. Lutfar Rahman
<b>Current Chairman :</b>	Prof. Dr. Md. Mustafizur Rahman
<b>No. of Faculty Members:</b>	40
<b>Number of Students:</b>	300
<b>Telephone :</b>	9661900 Ext. [7380 (Chairman) 7381 (Off.)]
<b>E-mail :</b>	office@cse.du.ac.bd
<b>Webpage:</b>	<a href="http://www.cse.du.ac.bd/">http://www.cse.du.ac.bd/</a>
<b>Offered Degrees</b>	B.Sc. in Engg, M.Sc. in Engg, M.Phil and Ph.D.

**(b) Course Credits Summary**

SL. No.	Title	Credit	
		B.Sc. Engg.	M.Sc. Engg.
1	Total credits	145	36.00
2	Credits for core courses (theory)	72	Thesis Group-18.00, Project Group-30.00
3	Credits for practical courses	31.50	0.00
4	Credits for general education	5.50	0.00
5	Credits for allied engineering courses	15.00	0
6	Credits for mathematics and Physics	15.00	0
7	Credits for projects/ field study	6.00	Thesis Group-18.00, Project Group-6.00
8	Credits for course viva	0.00	0.0

**(c) List of Faculty Members**

<p><b>Professor</b>                  Dr. Suraiya Parveen                  Dr. Md. Haider Ali                  Dr. Hafiz Mohammad Hasan Babu                  Dr. Md. Rezaul Karim                  Dr. Md. Hasanuzzaman                  Dr. Shabbir Ahmed                  Dr. Md. Mustafizur Rahman                  Dr. Saifuddin Md. Tareeq                  Dr. Md. Abdur Razzaque                  Dr. Chowdhury Farhan Ahmed                  Dr. Md. Mamun-Or-Roshid                  Dr. Mosaddek Hossain Kamal                  Dr. Upama Kabir                  Dr. Muhammad Asif Hossain Khan</p> <p><b>Associate Professor</b>                  Dr. Syed Faisal Hasan                  Abu Ahmed Ferdous                  Dr. Moinul Islam Zaber                  Dr. Mosarrat Jahan                  Saily Kabir</p>	<p><b>Assistant Professor</b>                  Dr. Ismat Rahman                  Dr. Sarker Tanveer Ahmed Rumees                  Hasnain Heickal                  Subra Chakroborti                  Dr. Md. Mosadek Khan                  Dr. Muhammad Ibrahim                  Dr. Md. Samiullah</p> <p><b>Lecturer</b>                  Md. Mahmudur Rahman                  Md. Ashraful Islam                  Ana Fariha                  Mahmud Jasim                  Md. Shiplu Howlader                  Mohammad Tawfiqul Islam                  Tahrima Hasem                  Iffat Anjum                  Mrs. Nusrat Mehajabin                  Asma Anaat                  Tamal Adhikary                  Mubin Ul Haque                  Md. Mofijul Islam                  Mrs. Zarrin Tasnim Sworna</p>
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**(d) Major Research Areas**

**Cyber Security and Digital Forensic:** Information Security, Network Security, Safe Net Surfing, Digital Forensic; **Data Mining Research Group**

**(DMR):** Data Mining and Knowledge Discovery, Machine Learning, Stream Data Management, Web Mining, Correlation Analysis, Database Management, Information Retrieval; **Data Science Research Group (DSR):**Data Analytics, Machine Learning, Statistical Inference, Big Data Management, Computational Social Science, Text Mining, **Green Networking Research Group (GNR):** Computer Networking, Cloud Computing, Sensor and Ad-Hoc Networks, Green Cellular Networks, Analysis of Computer Communication, MAC and Congestion Control; **Robotics Lab (robolab):** Robotics, Computer Vision, HRI, Digital Image Processing & Computer Graphics; **VLSI Research Group (VLR):** VLSI, CAD, VLSI design, Electronic System Design, Representations of Logic Functions, Multiple-valued Logic, FPGAs, Computer Architecture, Logic Synthesis and Formal Verification, Reversible Logic Synthesis.

**2.4 Nuclear Engineering**

**(a) Brief Introduction**

<b>Year of Established:</b>	2 <sup>nd</sup> December, 2012
<b>Founder Chairman:</b>	Prof. Dr. Khorshed Ahmad Kabir
<b>Current Chairman:</b>	Engr. Mohammad Monzur Hossain Khan
<b>No. of Faculty Members:</b>	12
<b>Number of Students:</b>	144
<b>Telephone :</b>	9661900 [8800 (Chairman), 8801 (Off.)]
<b>E-mail:</b>	nuclearengineering@du.ac.bd
<b>Webpage:</b>	http://www.du.ac.bd/academic/department_item/NED
<b>Offered Degrees:</b>	B.Sc. in Engg, M.Sc. in Engg., M.Phil. and Ph.D.

**(b) Course Credits Summary**

SL. No.	Title	Credit	
		B.Sc. Engg.	M.Sc. Engg.
1	Total credits	161	36
2	Credits for core courses (theory)	107	27
3	Credits for practical courses	21	2
4	Credits for general education	17	0
5	Credits for mathematics and statistics	9	0
6	Credits for projects/ field study	5.5	6
7	Credits for course viva	0	1
8	Industrial training	1.5	0

**(c) List of Faculty Members**

<b>Professor</b> Dr. Khorshed Ahmad Kabir (UGC Professor) Dr. Md. Shafiqul Islam	Md. Iqbal Hosan Md. Faisal Rahman Sabrina Rahman
<b>Assistant Professor</b> Engr. Mohammad Monzur Hossain Khan Md. Fazlul Huq Md. Hossain Sahadath Md. Mahidul Haque Prodhan	Md. Jafor Dewan <b>Lecturer</b> Md. Akhlak Bin Aziz Dr. Animesh Pal

**(d) Major Research Areas**

Nuclear reactor thermal hydraulics, Severe accident research in Nuclear power reactor, Nuclear Fuels, Gen IV reactors, Nuclear Medicine & Nuclear Security.

**2.5 Robotics and Mechatronics Engineering****(a) Brief Introduction**

<b>Year of Established:</b>	8 <sup>th</sup> September 2015
<b>Founder Chairman:</b>	Prof. Dr. Hafiz Mohammad Hasan Babu
<b>Current Chairman:</b>	Dr. Shamim Ahmed Deowan
<b>No. of Faculty members:</b>	7
<b>Number of Students:</b>	75
<b>PABX :</b>	9661900 [8811 (Chairman), 8810 (Off.)]
<b>E-mail :</b>	rme@du.ac.bd
<b>Webpage:</b>	www.rme.du.ac.bd
<b>Offered Degrees:</b>	B.Sc. in Engg, M.Sc. in Engg., M.Phil. and Ph.D.

**(b) Course Credits Summary**

SL. No.	Title	B.Sc. Engg.	Credits	
			M.Sc. Engg. Thesis Group	Project Group
1	Total Credits	160	36	36
2	Credits for core courses (theory)	81	18	30 (some lab courses could be incorporated)
3	Credits for practical courses	36		
4	Credits for general education	25		
5	Credits for mathematics and statistics	12		
6	Credits for projects/ field study/thesis	6	18	6
7	Credits for course viva	0		



**(c) List of Faculty Members**

<b>Professor</b> Dr. Lafifa Jamal	<b>Lecturer</b> Dr. Shugata Ahmed
<b>Assistant Professor</b> Dr. Shamim Ahmed Deowan	Abhishek Kumar Gosh
Dr. Sejuti Rahman	Sujan Sarker
	Md. Ariful Islam

**(d) Major Research Areas**

Intelligent Robotics, Medical Robotics, Children Robotics Education, Internet of Things (IoT), Artificial Intelligence of Things (AIoT), Machine Learning, Smart Intelligent Sensors, Control and Automation, Robotics Systems Design, Nano Robotics, Artificial Intelligence, 3D Reconstruction, 3D Mapping & Robot Navigation, Human Activity Recognition, Object Detection and Recognition, GAME, Deep Reinforcement Learning, Flexible Robots (Kinematics, Dynamics and Control), Magneto-rheological/ Electro-rheological Fluid based Dampers/Actuators, Design and Fabrication of Sensors, Sensor Materials, Haptic Technology, Smart Manufacturing (CAD/CAM), Networked Robotics: Cloud and Fog Robotics, Multi-agent system (Swarm Robotics, Crowd sourcing, Multi-agent path finding (MAPF), Computer Vision, Human Robot Interaction (HRI), Signal Processing, Image Processing, Neural Network, Biomedical Engineering & Telemedicine etc.

**3. Affiliated Institutes of this Faculty**

There are three affiliated institutes, these are:

- (a) Institute of Information Technology (IIT), IIT Bhaban, University of Dhaka, Telephone: 9661900/8670, Web: <http://www.iit.du.ac.bd/>
- (b) Institute of Leather Engineering and Technology (ILET), 43 Hazaribag, Dhaka-1205, Telephone: 9613728  
Web: [https://www.du.ac.bd/academic/department\\_item/ILET](https://www.du.ac.bd/academic/department_item/ILET)
- (c) Institute of Energy (IE), Energy Park Bhaban, University of Dhaka, Telephone: 9677125, 9661900/4570  
Web: [https://www.du.ac.bd/academic/department\\_item/RET](https://www.du.ac.bd/academic/department_item/RET)

**4. Affiliated Engineering Colleges**

- (a) Govt. Mymensingh Engineering College, Khagdahor (Rahmotpur), Mymensingh, Phone: 091-52111, Web: <http://www.mec.ac.bd/>
- (b) Govt. Faridpur Engineering College, Faridpur Sador, Faridpur, Phone: 0631-66304, 66305, Web: <http://fec.faridpur.gov.bd/>
- (c) Govt. Barisal Engineering College, North Dugrapur, (Barishal Bhola Road), Barishal, Phone: 02-9103956, Web: [www.barisal-eng.edu.bd](http://www.barisal-eng.edu.bd)
- (d) National Institute of Textile Engineering and Research (NITER), Nayarhat, Savar, Dhaka, 017550060275, 01820008876, Web: [www.niter.edu.bd](http://www.niter.edu.bd)
- (e) Shyamoli Textile Engineering College, 14/26 Shahjahan Road (Town Hall), Mohammadpur, Dhaka, Phone: 9133453, 01719731407, Web: [www.stec-edu.org](http://www.stec-edu.org)
- (f) Shahidul Chowdhury Engineering College, Mamudpur, Faridpur Sador, Faridpur, Phone: 01768710255, Web: [scec.edu.bd](http://www.scec.edu.bd)
- (g) K.M. Humayun Kabir Engineering College, Digarkanda, Mymensingh Phone: 01718968139, Web:

## 5. Employees of the Faculty

<b>Name</b>	<b>Designation</b>
Professor Dr. Md. Hasanuzzaman	Dean
Md. Nuruzzaman	Sr. Assistant Registrar (Academic)
Mumammad Masud Alam	Assistant Registrar (Academic)
Md. Jasim Uddin Khan	Senior Technical Officer
Asad Sikder	Sr. Messenger (Grade-3)
Md. Faiz Ahmed	Office Assistant
Md. Milon Mia	Cleaner

## 6. Faculty Journal

The Faculty of Engineering and Technology publishes a bi-annual Journal “Dhaka University Journal of Applied Science and Engineering (DUJASE)” since July 2010 to encourage the researchers. The journal publishes original research papers and short communications submitted by the faculty members and researchers from home and abroad in any area of applied science, engineering and technology. All papers are double blind peer reviewed by two reviewers. The editor processes the paper in consultation with other members of the editorial board. Final decision about publication is made by the editorial board on the basis of the review reports of the reviewers.

Correspondence should be made to Editor, Dhaka University Journal of Applied Science and Engineering, Office of the Dean, Faculty of Engineering and Technology, Curzon Hall Area, University of Dhaka, Dhaka-1000, Bangladesh, Email: editor.dujase@gmail.com, Phone: 01518333993.

## 7. Rules and Guidelines for B.Sc Engineering Program

The rules and guidelines for the B.Sc. Engineering programs (B. Sc Engineering in EEE, ACCE, CSE, NE, RME) is approved by the Faculty Meeting held on 11<sup>th</sup> June 2017, Academic Council held on 31<sup>st</sup> October 2017 and Syndicate Meeting on 27<sup>th</sup> November 2017. It will be applicable from Session 2017-2018 and onward.

### 7.1 The B.Sc. Engineering Program

The B.Sc. Engineering program in the Faculty of Engineering and Technology, University of Dhaka is a four academic year program. The program comprises eight semesters, each having duration of six academic calendar months to be distributed as follows:

- (a) **Classes** : Fifteen active weeks
- (b) **Preparatory Leave** : Maximum two weeks
- (c) **Semester Final Exam** : Two/three weeks
- (d) **Vacation** : Only the usual vacation of the University of Dhaka will be applicable
- (e) **Result publication** : Within two months from the last date of theory exam is desirable

### 7.2 Admission

- (a) Students will be admitted to the respective department or institute as per rules of the University of Dhaka
- (b) Each year application requirements will be defined by the Central Admission Committee of the University of Dhaka.
- (c) Departments can define specific requirements of subject-wise score in admission test with the approval of the Central Admission Committee.

## 7.3 Definition of Credit

- (a) For theoretical courses fifteen class-hour of fifty minutes each is defined as one credit.
- (b) For practical or laboratory courses, thirty hours work is defined as one credit.

## 7.4 Credit Requirements for the B.Sc. Engineering Program

- (a) Total credits : 145 to 165
- (b) Credits for core courses (theory) : 72 to 107
- (c) Credits for practical courses : 21 to 33
- (d) Credits for general education : 5.5 to 22
- (e) Credit for mathematics and statistics : 9 to 18
- (f) Credits or projects/field study : 2 to 4
- (g) Credit for course viva : 0 to 4

## 7.5 Grades and Grade Points

The University Grants Commission (UGC) of Bangladesh approved grading system applies to calculate grade and grade points. Grades and grade points will be awarded on the basis of marks obtained in the written, oral and practical Exam according to the following table:

Marks	Letter Grade	Grade Point
80% and Above	A+	4.00
75% to < 80%	A	3.75
70% to < 75%	A-	3.50
65% to < 70%	B+	3.25
60% to < 65%	B	3.00
55% to < 60%	B-	2.75
50% to < 55%	C+	2.50
45% to < 50%	C	2.25
40% to < 45%	D	2.00
Less Than 40%	F	0.00
	I	Incomplete
	W	Withdrawn

- (a) Only “D” or higher grade will be counted as credits earned by a student.
- (b) A student obtaining “F” grade in any course will not be awarded degree.
- (c) CGPA (Cumulative Grade Point Average) is the weighted average of the grade points obtained by a student in all the courses. CGPA will be calculated according to the following formula:

$$CGPA = \frac{\sum(\text{grade points in a course} \times \text{credits for the course})}{\text{total credits taken}}$$

- (d) In the tabulation process, only the total marks of a student in any course will be rounded-up to next number and the published result of the program will show only the grades earned and the Cumulative Grade Point Average (CGPA) at the end of each semester.

## 7.6 Marks Distribution for a Course:

### (a.) Theory Course

- (i) Attendance 5%
- (ii) In-course exam 25%
- (iii) Final exam 70%

**Total Marks 100%**

### (b) Lab Course

- (i) Lab attendance : 10%
- (ii) Continuous evaluation : 40-90%
- (iii) Final exam : 0-60%

### (c) Project and Thesis

- (i) Defense : 60%
- (ii) Report /Thesis : 40%

## (d) Guideline for Attendance Mark

Attendance (%)	Marks (05)	Marks (10)
90 and above	05	10
85 to 89	04	08
80 to 84	03	06
75 to 79	02	04
60 to 74	01	02
Less than 60	00	00

## 7.7 Exam Committee Formation

- (a) At the beginning of each academic semester/session, an exam committee shall be formed for that semester/session by the academic committee of respective department. Chairman of the exam committee will act as a course coordinator for that semester/session. The role of a course coordinator is to monitor the academic activities and report to the respective chairman to the department to avoid any unexpected situation.
- (b) The exam committee will consist of four members proposed by the academic committee of the respective department.
- (c) The committee members are a chairman, two internal members from the respective department and one external member outside of the department.
- (d) The exam committee will be responsible for all exam related activities as per University rules.

## 7.8 Evaluation of the Courses

The performance of a student in a course will be evaluated in the following ways:

- (a) For a theory course the evaluation will be made on the basis of attendance, quiz/assignment/presentation, in-course exam and final exam.
- (b) For any courses attendance, quiz/assignment/presentation, in-course exam will be evaluated by the course teacher/s and the result must be submitted to the exam committee and controller of exam before commencement to the semester final examination.
- (c) The percentage of attendance of students for each course (according to the format supplied by the chairman) along with the attendance sheet must be submitted to the chairman of the department before commence to the semester final examination.
- (d) The in-course exam scripts must be shown to students before the last class of a semester.
- (e) If more than one in-course exam is taken final mark will be calculated by averaging all of them (**best one will not be allowed**).
- (f) For theory course final exams, generally there will be two examiners: course teacher will be the first examiner and the second examiner will be within the department or from a relevant department of the University of Dhaka. If a suitable examiner is not found from the University of Dhaka, a second examiner may be appointed from other universities with prior permission from the Vice Chancellor.
- (g) (i) The answer scripts of final exam will be evaluated by two examiners and the average mark will be considered as the mark obtained, if the difference of two examiner marks not exceeded 20%.

- (ii) In case of a difference of marks between the two examiners is more than 20% then the script will be evaluated by a third examiner. Marks of nearest two examiners will be taken for average.
- (iii) If the differences of marks of third examiner from the first and second examiner become equal then average of three examiners marks will be obtained mark.
- (h) The assessment of laboratory /practical / field course will be made by observing overall performance of a student during practical (continuous evaluation), attendance, viva-voce, assignments and evaluation of lab final exam (set by the department)
- (i) For fourth year project evaluation will be made on the basis of presentation on project defense and project report.
- (j) For field study evaluation will be made on the basis of written examination or presentation on that field study and field study report.

## 7.9 Requirement to Sit for Course Final Exam

- (i) Students having 75% or more attendance on average is eligible to appear in the semester final Exam.
- (ii) Student having average 60-74% attendance will be allowed to sit for the exam with a fine Tk. 1000.00 (one thousand) in the University central account. In addition to usual fees a department may include additional fine as per the decision of the Academic Committee.
- (iii) Student having average attendance below 60% will not be allowed to sit for the semester final Exam but may seek re-admission in the program.

(iv) The semester final exam will be arranged centrally by the controller of examination of the University of Dhaka.

(v) The duration of theory course final exams will be as follows:

Credit	Duration of Exam
4 credits course	4 hours
3 credits course	3 hours
2 credits course	2.5 hours

(vi) Duration of lab exam will be defined by the respective department.

### 7.10 Promotion to the Next Academic Year

A student has to attend courses required for a particular semester, appeared at the annual exams and scored a minimum specified CGPA for promotion to the next year.

Promotion to the next year will be given if a student scores minimum CGPA as follows:

Year Description	CGPA
1 <sup>st</sup> year to 2 <sup>nd</sup> year	CGPA: 2.00
2 <sup>nd</sup> year to 3 <sup>rd</sup> year	CGPA: 2.25
3 <sup>rd</sup> year to 4 <sup>th</sup> year	CGPA: 2.50

### 7.11 Requirements for the Award of the B.Sc. Engineering Degree

- The student Must earn required credits in a maximum period of six academic years starting from the date of admission at 1<sup>st</sup> year 1<sup>st</sup> semester.
- The student Must obtain CGPA of at least 2.5 out of 4.00 to achieve the B.Sc. Engineering degree without “F” grade in any course.

### 7.12 Tabulations

- The exam committee will appoint two tabulators.
- Tabulators will receive marks of all courses from the chairman of the Exam committee.
- The two tabulators will independently prepare the tabulation sheets and compare before submitting it to the office of the Controller of Examination through the Chairman of Exam committee.

### 7.13 Improvement or Retake Examination

- A student will be allowed a single earliest available chance to clear “F” grade/grades complying with the time requirement for the degree. A student will not be allowed for grade improvement if he or she passes and the final semester result is published.
- A student may sit for improvement exam for courses where grade obtained is less than or equal to “C+” (C plus) and the best grade that a student can be awarded is B+ (B plus). However, if the grade is not improved the previous grade will remain valid.
- Improvement exam for all odd semesters will always be held with immediate next even semester and the same exam committee will conduct the improvement exam (for example, 1<sup>st</sup> semester improvement exam will be held on immediate 2<sup>nd</sup> semester, 3<sup>rd</sup> semester in improvement exam will be held on immediate 4<sup>th</sup> semester, 5<sup>th</sup> semester improvement exam will be held on immediate 6<sup>th</sup> semester, 7<sup>th</sup> semester improvement exam will be held on immediate 8<sup>th</sup> semester. Improvement exam for all even semesters will always be held with immediate next academic session or batch.
- In case of improvement exam in addition to usual fees a fine will be charged by the department through their Academic Committee.

### 7.14 Re-admission and Dropout

- (a) A student may be allowed re-admission for a maximum of two times to complete the B.Sc. Engineering program.
- (b) A student may seek re-admission provided he or she has at least 30%-attendance in the previous semester or year.
- (c) A student who is unable to get minimum required CGPA even after taking re-admission twice will be dropped out from the academic program.

### 7.15 Dean's Award

In recognition of excellent academic performance students may be given Dean's Merit Award for every batch after completion of the B.Sc. Engineering program as per following criteria.

- (a) An awardee must not have appeared in any improvement exam during his or her study period.
- (b) An awardee must have CGPA 3.75 or above.
- (c) However, the number of awardees of each department will not exceed two. In case of equal CGPA the final semester CGPA will be considered to break the tie.

### 7.16 Other General Regulations

- (a) For any matter not covered in the above guidelines, existing rules of the University of Dhaka will be applicable.
- (b) Disciplinary and punishable actions will be applied according to the existing rules of the University of Dhaka.

## 8. Rule and Guidelines for M.Sc. in Engineering Program

This rules and guidelines for M.Sc. in Engineering program (EEE, ACCE, CSE, NE, RME) is approved in the Faculty Meeting held on 15<sup>th</sup> July 2018, Academic Council on 25<sup>th</sup> July 2018 and Syndicate Meeting held on 29<sup>th</sup> July 2018. It will be effective from Session 2018-2019 and onward.

### 8.1 The Master of Engineering Program

The Master in Engineering program under the Faculty of Engineering and Technology, University of Dhaka is one and a half academic year (3 semesters) program. The program comprises three semesters, each having duration of six academic calendar months to be distributed as follows:

- |                                |  |
|--------------------------------|--|
| (a) <b>Classes</b>             | : Fifteen active weeks   |
| (b) <b>Preparatory Leave</b>   | : Maximum two weeks  |
| (c) <b>Semester Final Exam</b> | : Two weeks  |
| (d) <b>Vacation</b>            | : Only the usual Dhaka University's vacation will be applicable            |
| (e) <b>Result publications</b> | : Within two months from the last theory exam date or thesis defense date) |

### 8.2 Admission

- a. Students will be admitted to the respective department or institute as per University rules.
- b. Department may take new student from any University through admission test with prior permission of the Vice Chancellor.

### 8.3 Definition of Credit

(c) For theoretical courses fifteen class-hour of fifty minutes each is defined as one credit.

(d) For practical or laboratory courses thirty hours work in laboratory is defined as one credit.

### 8.4 Credit Requirements for the M.Sc. Engineering Program

- |  |   |       |
|--|---|-------|
| (a) Total credits                            | : | 36-40 |
| (b) Credits for theory courses               | : | 18-30 |
| (c) Credits for practical courses/field work | : | 0-10  |
| (d) Credit for projects                      | : | 0-12  |
| (e) Credit for thesis                        | : | 6-18  |
| (f) Course viva                              | : | 0-2   |

### 8.5 Grades and Grade Points

The UGC of Bangladesh approved grading system applies to calculate grade and grade points. Grades and grade points will be calculated on the basis of marks obtained in any type of examination.

Marks	Letter Grade	Grade Point
80% and Above	A+	4.00
75% to < 80%	A	3.75
70% to < 75%	A-	3.50
65% to < 70%	B+	3.25
60% to < 65%	B	3.00
55% to < 60%	B-	2.75
50% to < 55%	C+	2.50
45% to < 50%	C	2.25
40% to < 45%	D	2.00
Less Than 40%	F	0.00
	I	Incomplete
	W	Withdrawn

- (a) Only “D” or higher grade will be counted as credits earned by a student.
- (d) A student obtaining “F” grade in any course will not be awarded degree.
- (e) CGPA (Cumulative Grade Point Average) is the weighted average of the grade points obtained by a student in all the courses. CGPA will be calculated according to be following formula:
- $$CGPA = \frac{\sum(\text{grade points in a course} \times \text{credits for the course})}{\text{total credits taken}}$$
- (e) In the tabulation process, only the total marks of a student in any course will be rounded-up to next number and the published result of the program will show only the grades earned and the Cumulative Grade Point Average (CGPA) at the end of each semester.

### 8.6 Marks Distribution for a Course

#### (a.) Theory course

i. Attendance	5%
ii. In-course exam	25%
iii. Final exam	70%
<b>Total Marks</b>	<b>100</b>

#### (b) Lab course

(i) Attendance in lab classes	: 10%
(ii) Continuous evaluation	: 30-90%
(iii) Final exam	: 0-60%
<b>Total Marks</b>	<b>100</b>



**(c) Thesis and a project**

- (i) Defence : 40 or 60%
- (ii) Report Evaluation : 60% or 40%
- Total Marks** **100**

**(d) Mark distributions for field study**

- (i). Viva : 0-20%
- (ii) Report/thesis : 40-60%
- (iii) Written test : 40%
- Total Marks** **100**

**(e) Guidelines for Attendance Mark**

Attendance (%)	Marks (10)	Marks (05)
90 and above	5	10
85 to 89	4	8
80 to 84	3	6
75 to 79	2	4
60 to 74	1	2
Less than 60	00	00

**N.B. Department may change the marks distribution policy with the approval of the Academic Committee as well as Faculty Meeting.**

**8.7 Exam Committee Formation**

- (a) At the beginning of each academic semester/session, an exam committee shall be formed for that semester/session by the academic committee of respective department. Chairman of the

exam committee will act as a course coordinator for that semester/session. The role of a course coordinator is to monitor the academic activities and report to the respective chairman to the department to avoid any unexpected situation.

- (b) The exam committee will consist of four members proposed by the Academic Committee of the respective department.
- (c) The committee members are a Chairman, two internal members from the respective department and one external member outside of the department.
- (d) The exam committee will manage or coordinate all exam related activities as per university rules.

**8.8 Evaluation of the Courses**

**a. Theory Courses Evaluation**

The performance of a student in a theory course will be evaluated in the following ways:

- (i) For a theory course the evaluation will be made on the basis of attendances, quiz / assignment / presentation, in-course exam and final exam.
- (ii) For any courses attendance, quiz/assignment/presentation, in-course exam will be evaluated by the course teacher and the result must be submitted to the exam committee and controller of exam before commencement of semester final examination.
- (iii) The percentage of attendance of students for each course (according to the format supplied by the chairman) along with the

attendance sheet must be submitted to the Chairman of the department before commence to the semester final Exam.

- (iv) The in-course exam scripts must be shown to students before the last class of the semester.
- (v) If more than one in-course exam is taken the in course mark will be calculated by averaging all of them (best one will not be allowed).
- (vi) For theory courses final exam scripts generally evaluate by two examiners: course teacher will be the first examiner and the second examiner will be within the department or from a relevant department of University of Dhaka. If a suitable examiner is not found from University of Dhaka, a second examiner may be appointed from other universities with the prior permission from the Vice Chancellor.
- (vii) The average mark of two examiners will be considered as the mark obtained if the difference of their marks is less than or equal to 20%.
  - In case of a difference of marks between the two examiners is more than 20% the exam script will be evaluated by a third examiner. Marks of nearest two examiners will be taken for average.
  - If the differences of marks of third examiner from the first and second examiner become equal, then mark obtained will be calculated from average of three examiners.

**b. Lab Course Evaluation:**

The assessment of laboratory / practical courses will be made by observing overall performance of a student during practical (continuous evaluation) attendance, viva-voce, assignments and lab final exam (set by the department).

**c. Project Course Evaluation:**

- Evaluation will be done by 100 marks where there will be a project defense of 60% or 40% marks and project report evaluation of 40% or 60% marks.
- Two examiners will evaluate the project report and their average mark will be considered. In case of a difference of marks between the two examiners is more than 20%, it will be evaluated by a third examiner. Marks of nearest two examiners will be taken for average. If differences are equal the average of three marks will be considered.

**d. Field Study Evaluation:**

Field study report will be evaluated as per the rules of the respective departments.

**e. Thesis evaluation**

Thesis will be coordinated by the examination committee. Examination committee may include external expert to assess the thesis. Thesis will be evaluated on the basis of 100% marks where there will be thesis defense (40% or 60% marks) and thesis report will evaluation (60% or 40% marks). Evaluation will be done in following ways:

The student will defense his or her thesis work which is approved by the respective supervisor. The examination committee can accept or reject or conditionally accept the thesis for further process.

**(ii) Final defense**

A student will submit his or her thesis or revised thesis which was accepted or conditionally accepted in the pre-defense (if happened). The exam committee will announce specific date to defense his or her thesis and he or she has to defense on that date.

**(iii) Thesis report evaluation**

Two external examiners will evaluate the thesis report and their average mark will be considered. In case of a difference of marks between the two examiners is more than 20% the thesis will be evaluated by a third examiner. Marks of nearest two examiners will be taken for average. If differences are equal, the average of three marks will be considered.

**8.9 Requirement to Sit for Course Final Exam (Theory and Lab Courses)**

- (i) A student having 75% or more attendance on average is eligible to appear in the semester final Exam.
- (ii) Student having average 60-74% attendance will be allowed to sit for the exam with a fine Tk. 1000.00 (BDT. One Thousand) in the University central account. In addition to usual fees a department may fine according to the decision of their Academic Committee.

allowed to sit for the semester final exam but may seek re-admission in the program.

- (iv) In case of open credit system all the above evaluation will done course wise.

**8.10 Duration of Exam**

- i. The semester final exam will be arranged centrally by the Controller of Examination of the University of Dhaka.
- ii. The duration of theoretical course final Exams will be as follows:

Credit	Duration of Exam
4 credits course	4 hours
3 credits course	3 hours
2 credits course	2.5 hours

- iii. Duration of lab exam will be defined by the respective department.

**8.11 Requirements for the Award of the M.Sc. in Engineering Degree**

- (a) A student must earn required credits in a maximum period of three continuous semester starting from the date of admission in Master in 1<sup>st</sup> semester.
- (b) A student must obtain CGPA of at least 2.5 to achieve the Master in engineering degree without ‘F’ grade in any course to fulfill required credits.
- (c) The student can readmit for another three semesters.

### 8.12 Tabulations

- (a) The exam committee will appoint two tabulators.
- (b) Tabulators will receive marks of all courses from the Chairman of the Exam Committee.
- (c) The two tabulators independently prepare the tabulation sheets and compare before submitting to office of the Controller of Examination through the Chairman of Exam Committee.

### 8.13 Improvement or Retake Examination

- (a) A student will be allowed a single earliest available chance to clear “F” grade/grades complying with the time requirement for the degree. A student will not be allowed for grade improvement if he or she passes and the final semester result is published.
- (b) A student may sit for improvement exam for courses where grade obtained is less than or equal to “C+” (C plus) and the best grade that a student can be awarded is “B+” (B plus). However, if the grade is not improved the previous grade will remain valid.
- (c) In addition to usual fees a department may fine according to the decision of Academic Committee Meeting.

### 8.14 Re-admission and Dropout

- (a) A student may be allowed re-admission for one time.
- (b) A student may seek re-admission provided he or she has at least 30% (thirty percentages) attendance in the previous semester or year.
- (c) A student who is unable to get minimum required CGPA even after taking re-admission will be dropped out from the academic program.

- (d) In case of rejection of a thesis or “F” grade in a thesis the student can retain his or her theory course mark for a period one semester.

### 8.15 Other General Regulations

- (c) For any matter not covered in the above guidelines, existing rules of the University of Dhaka will be applicable.
- (d) Disciplinary and punishable actions will be applied according to the existing rules of the University of Dhaka.