

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



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

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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 11th June 2017, Academic Council Meeting held on 31st October 2017 and Syndicate Meeting on 27th November 2017. The current rules and guidelines were followed by the faculty from Session 2017-2018. Last amendment approved by the Faculty Meeting held on 05th March 2023, Academic Council held on 13th April 2023 and Syndicate Meeting held on 30th April 2023.

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.
- (d)

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 for projects/field study/internship : 2 to 8
- (g) Credit for course viva : 0 to 6

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:
- $$\text{CGPA} = \frac{\sum(\text{grade points in a course} \times \text{credits for the course})}{\text{total credits taken}}$$
- (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 examination 25%
- (iii) Final examination 70%

Total Marks 100%

(b) Lab Course

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

(c) Project

- (i) Continuous evaluation : 0- 30%
- (ii) Presentation : 0 - 60%
- (iii) Report : 30 - 80%

(d) Field study or Internship

- (i) Viva/presentation : 0- 20%
- (ii) Written examination : 0 - 40%
- (iii) Report : 0 - 60%

(e) 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 Examination Committee Formation

- (a) At the beginning of each academic semester/session, an examination committee shall be formed for that semester/session by the academic committee of respective department. Chairman of the examination 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 examination 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 examination committee will be responsible for all examination 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 examination and final examination.
- (b) For any courses attendance, quiz/assignment/presentation, in-course examination will be evaluated by the course teacher/s and the result must be submitted to the exam committee and controller of examination 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 examination scripts must be shown to students before the last class of a semester.
- (e) If more than one in-course examination is taken final mark will be calculated by averaging all of them (**best one will not be allowed**).
- (f) For theory course final examination, 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 examination 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 examination (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 or Internship evaluation will be made on the basis of written examination and/or presentation on that field study and field study report.

7.9 Requirement to Sit for Course Final Examination

- (i) Students having 75% or more attendance on average is eligible to appear in the semester final examination.
- (ii) Student having average 60-74% attendance will be allowed to sit for the examination with a fine as per the University rules.
- (iii) Student having average attendance below 60% will not be allowed to sit for the semester final examination but may seek re-admission in the program.
- (iv) The semester final examination 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 Examination
4 credits course	4 hours
3 credits course	3 hours
2 credits course	2.5 hours

(vi) Duration of lab examination 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 examinations 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 st year to 2 nd year	CGPA: 2.00
2 nd year to 3 rd year	CGPA: 2.25
3 rd year to 4 th 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 1st year 1st 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 examination committee will appoint two tabulators.
- Tabulators will receive marks of all courses from the chairman of the examination 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 examination committee.

7.13 Improvement Examination

- To clear “F” grade/grades of any course/courses, a student will get two consecutive academic years complying with the time required for the degree. The best grade that a student can be awarded is B+ (B plus).
- A student may sit for the improvement examination in two consecutive academic years, for any course/courses complying with the time required for the degree where the 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.

7.14 Re-admission and Dropout

- A student may be allowed re-admission for a maximum of two times to complete the B.Sc. Engineering program.
- A student may seek re-admission provided he or she has at least 30%-attendance in the previous semester or year.
- 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. Rules 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 15th July 2018, Academic Council on 25th July 2018 and Syndicate Meeting held on 29th July 2018. This rules and guidelines were effected from Session 2018-2019.

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) Classes | : Fifteen active weeks |
| (b) Preparatory Leave | : Maximum two weeks |
| (c) Semester Final Exam | : Two weeks |
| (d) Vacation | : Only the usual Dhaka University's vacation will be applicable |
| (e) Result publications | : Within two months from the last theory examination 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 examination | 25% |
| iii. Final examination | 70% |
| Total Marks | 100 |

(b) Lab course

- | | |
|-------------------------------|------------|
| (i) Attendance in lab classes | : 10% |
| (ii) Continuous evaluation | : 30-90% |
| (iii) Final examination | : 0-60% |
| Total Marks | 100 |

(c) Thesis and a project

(i) Defence	: 40 or 60%
<u>(ii) Report Evaluation</u>	: 60% or 40%
Total Marks	100

(d) Mark distributions for field study

(i). Viva	: 0-20%
(ii) Report/thesis	: 40-60%
<u>(iii) Written test</u>	: 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 Examination Committee Formation

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

the examination 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 examination 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 examination committee will manage or coordinate all examination 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 examination and final examination.
- (ii) For any courses attendance, quiz/assignment/presentation, in-course examination will be evaluated by the course teacher and the result must be submitted to the examination committee and controller of examination 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 commencement to the semester final examination.

- (iv) The in-course examination scripts must be shown to students before the last class of the semester.
- (v) If more than one in-course examination 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 examination 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 examination 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:

(i) Pre-defense (if applicable)

The student will defend 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 examination committee will announce specific date to defend his or her thesis and he or she has to defend 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 Examination (Theory and Lab Courses)

- (i) A student having 75% or more attendance on average is eligible to appear in the semester final examination.
- (ii) Student having average 60-74% attendance will be allowed to sit for the examination 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.

(iii) A student having an average attendance below 60% will not be 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 be done course wise.

8.10 Duration of Examination

- i. The semester final examination will be arranged centrally by the Controller of Examination of the University of Dhaka.
- ii. The duration of theoretical course final examinations 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 semesters starting from the date of admission in Master in 1st 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 examination committee will appoint two tabulators.
- (b) Tabulators will receive marks of all courses from the Chairman of the examination 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 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 examination 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

- (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.