

Ordinance for the Doctor of Philosophy Programme

1. Degrees Offered

The degree of Doctor of Philosophy shall be offered by the University in the following Departments/Institutes:

Department of Architecture

Department of Chemical Engineering

Department of Chemistry

Department of Civil Engineering

Department of Computer Science and Engineering

Department of Electrical and Electronic Engineering

Department of Industrial and Production Engineering

Department of Materials and Metallurgical Engineering

Department of Mathematics

Department of Mechanical Engineering

Department of Naval Architecture and Marine Engineering

Department of Petroleum and Mineral Resources Engineering

Department of Physics

Department of Urban and Regional Planning

Department of Water Resources Engineering

Institute of Water and Flood Management

and

Such other department/Institute as may be approved by the Syndicate of the University.

The degree of Doctor of Philosophy shall be abbreviated as Ph.D.

2. Admission Requirements

2.1 For admission to the courses leading to a Ph.D. degree a candidate

a) must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S.S.C. and H.S.C. or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.

b) must have at least 50% marks or a minimum GPA of 2.50 out of 4.0 or its equivalent in B. Sc. Engg. / four-year B. A or B. Sc. degree / M. A or M. Sc. or MSS degree / B. Arch. / BURP in the relevant branch.

c) must have a minimum GPA of 2.75 out of 4.0 or its equivalent in M. Sc. Engg. / M. Engg. / M. Phil / MURP / M. Arch. / M. Sc. (WRD) / MBA degree in the relevant branch.

d) Specific requirements for different Departments and Institutes are spelt out in the following sections.

2.2 For engineering, the minimum qualification for admission shall normally be an M.Sc. Engg./M. Engg. degree in the appropriate branch of engineering or its equivalent from any recognized Institution. For Materials and Metallurgical Engineering, applicants having an M. Phil. in Materials Science or its equivalent from a recognized institution may also be eligible for admission.

For advance engineering management (AEM) in IPE department, the minimum qualification for admission shall normally be an M.Sc. Engg./M. Engg. in IPE/AEM or its equivalent from a recognized Institution or MBA degree or its equivalent from a public University.

2.3 For Urban and Regional Planning, the minimum qualification for admission shall normally be an MURP degree or its equivalent from any recognized Institution.

2.4 For Architecture, the minimum qualification for admission shall normally be an M. Arch. degree or its equivalent from any recognized Institution.

2.5 For Physics, the minimum qualification for admission shall normally be an M. Phil. degree in Physics/ Applied Physics or its equivalent from any recognized Institution.

or

M.Sc. Engg. degree in Mechanical/ Electrical & Electronic / Materials & Metallurgical Engineering or its equivalent

2.6 For Chemistry, the minimum qualification for admission shall normally be an M. Phil. degree in Chemistry / Applied Chemistry or its equivalent from any recognized Institution.

or

M.Sc. Engg. degree in Chemical / Materials & Metallurgical / Electrical & Electronic / Mechanical Engineering.

2.7 For Mathematics, the minimum qualification for admission shall normally be an M. Phil. degree in Mathematics or Applied Mathematics or its equivalent from any recognized Institution.

or

M.Sc. Engg. degree provided he completes some prerequisite courses in Mathematics as determined by a Selection Committee.

2.8 For Water Resources Development, the minimum qualification for admission shall normally be an M.Sc. Engg./M. Engg. degree in Civil Engineering/Water Resources Engineering / Environmental Engineering / Agricultural Engineering or M. Sc. degree in Water Resource Development or its equivalent from any recognized Institution.

2.9 A student already working for an M.Sc. Engg./ M. Phil/ MURP / M. Arch./ M.Sc.(WRD) degree at this University and showing excellent progress and promise in thesis work may be provisionally transferred to the Ph.D. degree programme after completion of M.Sc. Engg./ M.Phil./ MURP/ M. Arch./ M.Sc.(WRD) course work with a minimum GPA of 3.0 out of 4.0 on approval of the Committee for Advanced Studies and Research (CASR) on the recommendation of the relevant Board of Post Graduate Studies (BPGS)/Research and Academic Committee (RAC).

3. Admission Procedure

3.1 A candidate may apply to the Registrar for provisional admission to the Ph. D programme in any semester.

3.2 There shall be a Selection Committee in each department/ institute as constituted by the relevant BPGS/RAC on recommendation of the Head/Director of the Department/Institute.

3.3 A candidate selected by the Selection Committee shall be provisionally admitted and may be required to pass the prerequisite non-credit courses as prescribed by the Selection Committee.

3.4 On the recommendation of the appropriate BPGS / RAC and CASR the rules for admission into the University for post graduate studies shall be framed from time to time by the Academic Council. CASR on its own may, if it deems fit, recommend such rules for admission for approval of the Academic Council.

4. Registration

4.1 Every selected candidate, unless he/she has already been registered, shall get himself/herself registered with the University.

4.2 Every registered candidate (student) shall get himself/herself enrolled on payment of prescribed fees and the dues as per the University rules before the commencement of each

semester. Course registration must be completed within two weeks from the start of the semester.

4.3 No late registration will be allowed after two weeks of designated dates of registration. Late registration after this date may only be accepted for thesis if the student submits a written appeal to the Registrar through the concerned Head and can document extenuating circumstances such as medical problems (physically incapacitated and not able to be presented) from the Chief Medical Officer (CMO) of the University or some other academic commitments which precluded registration prior to be last date of registration.

Student will be charged a late registration fee of Tk.1000.00 (One thousand) only. This extra fee will not be waived whatever be the reason for late registration.

4.4 If a student is unable to complete the final examination of a semester due to serious illness or serious accident or official commitment, he/she may apply to the Registrar in a prescribed form through Head/Director of the degree awarding Department/Institute for total withdrawal from the semester within a week after the end of the semester final examination.

The application must be supported by a medical certificate from the CMO, BUET or relevant Official documents. The Academic Council will take the final decision about such application on the recommendation of the relevant BPGS/RAC.

5. Appointment of a Supervisor

On provisional admission, the Selection Committee as constituted in Art.3.2 shall submit a name of a Supervisor who shall be a full-time member of the staff belonging to the relevant department/institute and a Co-supervisor from within or outside the department/institute, if necessary. These selections have to be approved by the CASR. The supervisor shall prescribe a plan of study to be undertaken by the student and supervise the progress of the candidate's work.

6. Final Registration

A provisionally admitted student shall be deemed to be eligible for final registration as a Ph.D. student with effect from the date of his/her provisional admission after he/she passes the comprehensive examination (Art.12.3 of this Ordinance).

7. Academic Requirements and Regulations

7.1 The minimum duration of the Ph.D. course shall be four semesters from the date of provisional admission. A student must complete all requirements for the Ph.D. degree within six academic years (session) from the date of his provisional admission.

7.2 Academic progress shall be measured in terms of Credit hours earned by a student. One Credit hour subject shall normally require 14 hours of lecture for one semester while one Credit hour for thesis work should normally require 42 hours of research work for one semester. The number of Credit hours for each subject shall be as specified in the syllabus of the respective department/institute.

7.3 A student must complete a minimum of 54 credit hours of which 45 credit hours shall be assigned for a thesis.

7.4 There shall be two categories of students, namely, full-time students and part-time students.

7.4.1 A student may enroll as a part-time student.

Students, serving in different organizations, may also be admitted as part time students with the written consent of the employer. A part time student may be assigned a maximum of 9 credit hours of course including thesis work in any semester.

7.4.2 Full-time students must register for a minimum of 12 credit hours and a maximum of 15 credit hours per semester. A full-time student shall not be allowed to be in the employment of any organization (even as a part-time employee). However, they may be employed as Teaching/Research Assistant at the University. If a full-time student becomes an employee (full time or part time) of any other organization in the middle of a semester, he/she may, with the approval of the Head/Director of the Department/Institute and his/her Employer, be allowed to continue as a full-time student for that semester.

7.4.3 A student may be allowed to switch from part-time to full-time or vice versa on the recommendation of the respective Doctoral Committee before the commencement of a semester.

7.5 The subjects of study in the different Departments / Institutes shall be as recommended by the respective BPGS / RAC and the Faculty / CASR and approved by Academic Council. The BPGS /RAC may review the curriculum from time to time and recommend any changes as may be considered necessary.

7.6 The subjects that may be offered in any semester shall be as decided by the relevant department/institute.

7.7 A student on the recommendation of the relevant BPGS / RAC and as approved by the CASR may be allowed to transfer a maximum of 3.0 credits of the courses completed by the student at a recognized institution provided that the courses were not taken earlier than five calendar years from the date of his/her first enrolment in the respective programme at BUET and that the

student obtained a minimum GP of 3.0 out of 4.0 or its equivalent in such courses and that the courses are equivalent to the approved courses of BUET.

8. Grading System

8.1 Final grades for courses shall be recorded as follows:

Grade	Merit description	Grade points
A (Plus)	Excellent	4.0
A	Very good	3.5
B (Plus)	Good	3.0
B	Average	2.5
C	Pass	2.0
F	Failure	0.0
I	Incomplete	–
S	Satisfactory	–
U	Unsatisfactory	–
W	Withdrawn	–

8.2 Courses in which the student gets F grade shall not be counted towards credit hour requirements and for the calculation of Grade Point Average (GPA).

8.2.1 The C grades, up to a maximum of two courses, may be ignored for calculation of GPA at the written request of the student to the Head of the Department / Director of the Institute on the recommendation of supervisor provided that the student has fulfilled the total course credit hour requirement in the remaining subjects with a minimum GPA of 2.75.

8.2.2 When a course is repeated for improvement, better grade shall be counted for calculation of GPA.

8.2.3 Performance in all the subjects including all the F grades shall be reflected in the transcript.

8.3 Grade I is given only when a student is unable to sit for the examination of a course at the end of the semester because of circumstances beyond his control. He/she must apply to the Head of the Department / Director of the Institute within one week after the examination to get an I grade in that course. It must be completed within the next two semesters, otherwise, the I become a F grade. He/she may, however, be allowed to register without further payment of tuition fees for that course.

8.4 Satisfactory or Unsatisfactory used only as final grades for thesis and non-credit courses. Grade for thesis "In Progress" shall be so recorded. If, however, thesis is discontinued an I grade shall be recorded.

8.5 Students may enroll for non-credit course(s) termed as audit course(s) on recommendation of his/her thesis Supervisor and Head of the Department/ Director of the Institute.

8.6 A student shall withdraw officially from a course within two working weeks of the commencement of the semester or else his/her grade in that course shall be recorded as F unless he/she is eligible to get a grade of I. A student may be permitted to withdraw and change his/her course within the specified period with the approval of his Supervisor, Head of the Department/ Director of the Institute and the respective teacher(s) concerned. (In that case his/her grade in the courses registered shall be recorded as 'W' in his Academic Record but shall not be reflected in the transcript.)

8.7 Numerical markings may be made in answer scripts, tests etc., but all final gradings to be reported to the Controller of Examinations shall be in the letter grade system as detailed below:

90% and above	A (Plus)
80% to below 90%	A
70% to below 80%	B (Plus)
60% to below 70%	B
50% to below 60%	C
Below 50%	F

9. Doctoral Committee

A Doctoral Committee for every student shall be proposed by the Supervisor in consultation with the Head of the department / Director of the Institute. The committee shall be approved by the CASR on recommendation of the BPGS / RAC. The Committee shall be formed within six months from the date of the student's provisional admission. The Committee shall consist of at least five members but shall not exceed seven including the Head of the Department / Director of the Institute and the Supervisor. The Supervisor shall act as the Chairman and the Head of the Department / Director of the Institute will be an ex-officio member of the Doctoral Committee. The Doctoral Committee should meet from time to time at the request of the Supervisor to review the progress of the student. In special circumstances CASR may approve any addition and/or alteration in the Doctoral Committee on the recommendation of the Supervisor through the Head of the Department / Director of the Institute.

10. Research Proposal

10.1 The student, after passing the comprehensive examination, shall submit a research proposal to the Doctoral Committee which shall examine the proposal and recommend it for the approval of the CASR through the Head of the Department / Director of the Institute. In special

circumstances the Doctoral Committee may recommend through the Head of the Department / Director of the Institute to CASR for approval of any subsequent changes in the research proposal.

10.2 Research work for a thesis shall be carried out in this University or at a place(s) approved by the Doctoral Committee. The work schedule and financial involvement should be mentioned in the research proposal for carrying out research work outside the university.

11. Conduct of Examination

11.1 In addition to tests, assignments and/or examinations during the semester as may be given by the teacher(s) concerned, there shall be a written examination and/or other tests for each of the subjects offered in a semester at the end of that semester, the dates of which shall be announced by the Controller of Examinations, BUET as advised by the Dean/Director of the respective Faculties/Institute at least two weeks before the commencement of the examination. The final grade in a subject shall be based on the performance in all tests, assignments and/or examinations.

11.2 The Controller of Examinations shall keep up-to-date record of all the grades obtained by a student in individual Academic Record Card. Grades shall be announced by the Controller of Examinations at the end of each semester. In addition, each student is entitled to one official transcript of the University record at the completion of his/her academic programme from the office of the Controller of Examinations on production of statement of clearance from all departments/institutes /offices.

11.3 The BPGS/RAC of a department/institute shall recommend the names of the paper setters and examiners for the semester examination at least two weeks before the date of commencement of the examination to the Vice-Chancellor for approval.

12. Qualifying Requirements

12.1 Course Work

To qualify for the degree a student must earn a minimum grade point average (GPA) of 2.75 based on the weighted average of grade points (GP) in his / her course work.

12.1.1 Two courses may be repeated for improvement with the prior approval of the Head of the Department / Director of the Institute on the recommendation of Supervisor. Such approval shall be reported to the BPGS/RAC.

12.1.2 A student obtaining F grade in a course may be allowed to repeat the course with the prior approval of Head of the Department / Director of the Institute on the recommendation of Supervisor. Such approval shall be reported to the BPGS/RAC.

12.2 A student shall not be allowed to continue the programme if he/she obtains a total of three or more F grades in one or more than one subjects taken together, during the course of his / her studies.

12.3 Comprehensive Examination

The date(s) and time of the comprehensive examination shall be fixed by the Doctoral Committee on the request of the Supervisor. Comprehensive examination shall be held after the completion of the course work by the student.

The comprehensive examination shall comprise of a written examination and/or an oral examination to test the knowledge of the student in his/her field of study and research. The Doctoral Committee shall conduct the comprehensive examination. If a student fails in a comprehensive examination, he/she shall be given one more chance to appear at the examination as scheduled by the Doctoral Committee.

12.4 In addition to successful completion of course works and comprehensive examination every student shall submit a thesis on his/her research work fulfilling the requirements.

13. Thesis

13.1 At the end of the student's research work the student shall submit a thesis which must be an original contribution to engineering/sciences and worthy of publication. At least six type written copies of the thesis in the final form as per Appendix-I must be submitted to the Head of the Department.

13.2 The student shall certify (as per Appendix-II) that the research work was done by him / her and that this work has not been submitted elsewhere for any other purpose (except for publication).

13.3 On completion of the research work and submission of the thesis an oral examination shall be arranged on a date or dates fixed by the Supervisor in consultation with the Head of the Department / Director of the Institute in which the student shall defend his/her thesis. The student must satisfy the examiners (as constituted in Art. 14.1) that he/she is capable of intelligently applying the results of his/her research to the solution of problems, of undertaking independent research and afford evidence of satisfactory knowledge related to the theory and technique used in his / her research work.

14. Examination Board

14.1 An Examination Board for every student for thesis and oral examination shall consist of the Doctoral Committee and one or more external examiner(s) to be appointed by the CASR on the

recommendation of the thesis supervisor in consultation with the Head of the Department / Director of the Institute. The Board shall consist of at least six members including the Head of the Department / Director of the Institute and the supervisor. The supervisor shall act as the Chairman of the Examination Board. At least one external examiner shall be appointed from outside the University. If the external examiner is appointed from outside the country a copy of the thesis should be sent to him / her for his / her evaluation and his / her written opinion be placed before the Examination Board.

14.2 If any examiner is unable to accept the appointment or has to relinquish his / her appointment before/during the examination, the Vice- Chancellor shall appoint another examiner in his / her place, on the suggestion from the Supervisor in consultation with the Head of the Department / Director of the Institute. This appointment will be reported to the CASR.

14.3 In case a student fails to satisfy the Examination Board in thesis and /or oral examination, the student shall be given one more chance to resubmit the thesis and/or appear in oral examination as recommended by the Board.

A student who has been transferred to the Ph.D. programme from the M.Sc. Engg./M. Phil/ MURP/ M. Arch./ M.Sc. (WRD) programme may be awarded an M.Sc. Engg./M. Phil/ MURP/ M. Arch./ M.Sc. (WRD) degree on recommendation of the Supervisor, if the student fails to qualify for the award of the Ph.D. degree.

15. Striking off and removal of names from the rolls

The name of the student shall be struck off and / or removed from the rolls of the University on the following grounds:

- (i) Non-payment of dues within prescribed period. Post graduate students residing in the halls of residence shall be subject to the same conditions as allowed in the Ordinance Relating to the Board of Residence and Discipline.
- (ii) Failing to proceed with the programme by the exercise of Art.7.1 or 12.2 or 12.3 of this Ordinance.
- (iii) Failing to make satisfactory progress in his/her programme as reported by the supervisor through the BPGS / RAC and approved by CASR.
- (iv) Forced to discontinue his/her studies by the Board of Residence and Discipline.
- (v) Withdrawn officially from the Ph.D. programme.

16. Academic Fees

Items of Academic fees shall be as per Appendix III, and the fees shall be reviewed and recommended from time to time by the Academic Council.

17. Refund of Fees

A student withdrawing officially from all courses and / or thesis as per Art. 15(v) is entitled to get a refund of 50% of the course registration fees provided, he / she withdraws in writing through the respective Head of the Department / Director of the Institute before the expiry of two working weeks from the commencement of the classes. Thesis registration fees in any case are not refundable.