

Academic Ordinance for Postgraduate Studies for the Award of Master of Science in Engineering/ Master of Engineering/Master of Philosophy/Doctor of Philosophy Degree

1. Definitions

- 1.1 'University' means Rajshahi University of Engineering & Technology abbreviated as RUET.
- 1.2 'Syndicate' means the syndicate of RUET.
- 1.3 'PGAC' means the post graduate academic committee of RUET.
- 1.4 'DSC' means the Doctoral Scrutiny Committee.
- 1.5 'Academic Council' means the Academic Council of RUET.
- 1.6 'CASR' means the Committee for Advanced Studies and Research of RUET.

CASR shall consist of the following members:

Vice Chancellor	Chairman
Two Heads of the degree awarding departments by rotation not below the rank of Associate Professor	Members
One Professor from each department from rest of the degree awarding departments by rotation	Member
One Professor from outside the University nominated by the Vice Chancellor.	Member

Vice chancellor will nominate one secretary of the CASR.

At Least 40% members will fulfill the quorum.

2. Degrees Offered

The post graduate degrees to be offered under this ordinance are as follows.

2.1 Master of Science in

- i) Civil Engineering abbreviated as M. Sc. Engg. (CE).
- ii) Electrical & Electronic Engineering abbreviated as M.Sc.Engg. (EEE).
- iii) Mechanical Engineering abbreviated as M.Sc. Engg. (ME).
- i) Computer Science and Engineering abbreviated as M.Sc Engg. (CSE).

2.2 Master of Engineering in

- i) Civil Engineering abbreviated as M. Engg. (CE).
- ii) Electrical & Electronic Engineering abbreviated as M. Engg. (EEE).
- iii) Mechanical Engineering abbreviated as M. Engg. (ME).
- iv) Computer Science and Engineering abbreviated as M. Engg. (CSE)

2.3 Master of Philosophy in

- i) Mathematics abbreviated as M. Phil (Math)
- ii) Physics abbreviated as M. Phil (Phy)
- iii) Chemistry abbreviated as M. Phil (Chem)

2.4 Doctor of Philosophy in

- i) Civil Engineering abbreviated as Ph.D (CE)
- ii) Electrical & Electronic Engineering abbreviated as Ph.D. (EEE)
- iii) Mechanical Engineering abbreviated as Ph.D. (ME)
- iv) Computer Science and Engineering abbreviated as Ph.D. (CSE)
- v) Mathematics abbreviated as Ph.D. (Math)
- vi) Physics abbreviated as Ph.D. (Phy)
- ii) Chemistry abbreviated as Ph.D.(Chem)

- 2.5. The above degree may be offered in any other discipline approved by Syndicate on the recommendation of the Academic Council.

3. Admission

- 3.1 For admission to the courses leading to the award of the Degree of M. Sc. Engg./M. Engg. in any branch, a candidate must have a B. Sc. Engg. or an equivalent degree in the relevant/ related field with good academic records from any recognized Institute/University.
- 3.2 For admission to the courses leading to the award of M. Phil degree in any branch of Science, a student must have an M. Sc. degree in the relevant branch or equivalent degree from any recognized Institution or University with good academic record (No third class/division in any level of study).
- 3.3 For admission to the courses leading to the award of Ph.D degree in any branch, a candidate must have an M. Sc Engg./M. Engg./M. Phil or an equivalent degree in the relevant branch from any recognized Institution or University with good academic record. A student in M. Sc. Engg./M. Engg./ M. Phil program may be transferred to Ph.D. program if (s)he shows excellent progress in Masters thesis after completion of courses evaluated by thesis examination committee and approved by Academic Council on the recommendation of PGAC and CASR.
- 3.4 Application for admission to the above courses shall be invited through regular means of advertisement and shall be received through prescribed application form.
- 3.5 On the recommendation of PGAC, the rules for admission into various departments for post-graduate studies may be amended from time to time by the Academic council through CASR.
- 3.6 For admission a candidate may be required to appear at a written and/or oral test conducted by a Selection Committee as constituted by the respective PGAC.
- 3.7 Every selected candidate shall get himself registered with the university.
- 3.8 Each student shall be assigned by the respective PGAC, an adviser from the teachers of the department, not below the rank of an Assistant Professor. Prior to each enrollment and course registration for any semester, the Adviser/Supervisor (as appointed by Articles 8/10 of this Ordinance) shall check and approve the student's schedule for subjects, prerequisites as recommended by the Selection Committee and total credit hours.
- 3.9 Every registered candidate shall get himself enrolled on payment of prescribed fees and other dues before the commencement of each semester.
- 3.10 Eligibility for the admission of students from other university/country in the aforementioned post-graduate program will be examined by the equivalence committee.

4. Academic Regulations

- 4.1 The minimum duration of the M.Sc. Engg./M. Engg./ M. Phil course shall be of three semesters. A candidate for the masters degree must complete all requirements for the degree within Five academic years from the date of his first admission.
- 4.2 The minimum duration of the Ph. D course shall be of Six semesters. A student must complete all the requirements for Ph. D degree within seven academic years from the date of his first admission.
- 4.3 Duration of each semester shall not be less than 24 weeks, including course registration and semester final examination. Normally there shall be two semesters in one academic year.
- 4.4 Academic progress shall be measured in terms of credit hours earned by a student. One credit hour for theory course shall normally require one hour of class attendance per week for one semester. While one credit hour for thesis, Project or laboratory class should normally require three hours of work per week for one semester. The number of credit hours for each subject shall be as specified in the syllabus of the respective department.
- 4.5 Minimum requirements of the theory and thesis/project credit hours to be earned by students for different degrees are as outline in the following table:

Degree	Theory	Thesis	Project	Total
M. Sc Engg	18	18	-	36
M. Engg	30	-	6	36
M. Phil	24	24	-	48
Ph. D	9	45	-	54

4.6 Full time and Part time students

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

- 4.6.1. Students, serving in different organization may be admitted as part time students with a written consent from the employer. A part time student may be assigned a maximum of 9 credit hours per semester.
- 4.6.2 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 part time employee). However, they may be awarded teaching/research assistantship (TA/RA) in RUET. A student already in employment may be admitted as full time students only if he is on leave or deputation from his employer.
- 4.6.3. If a full time student gets an employment while he/she is in a running semester, he/she may be allowed to continue the rest of that semester as full time student, with prior approval of the Head of the department and the employer.
- 4.7 The courses that shall be offered in any semester shall be as determined by the relevant department.
- 4.8 After the first semester, the PGAC may consider a student's application to transfer the credits earned elsewhere if the following conditions are fulfilled.
- i) The credits should be earned from a recognized Institution or University.
 - ii) Maximum 50% Credit-Hours in course work may be transferred.
 - iii) Credits earned before Five academic years from the date of application will not be considered.
 - iv) Only B+ or higher grades will be considered.
- The student's performance in the first semester and the standard and application of the courses studies elsewhere should be specially considered in giving such approval.

5. Grading System

- 5.1 Letter grade system will be applied in assessment of the performance of a student in semester examination. Numerical marking may be made in answer scripts, tests etc. but all final grading to be reported to the Head of the department in prescribed form, shall be in the letter grade system as outlined below.

Marks obtained	Grades	Description	Grade Points
90% and above	A+	Excellent	4.0
80% to below 90%	A	Very good	3.5
70% to below 80%	B+	Good	3.0
60% to below 70%	B	Average	2.5
50% to below 60%	C	Pass	2.0
Below 50%	F	Fail	0.0
	I	Incomplete	
	S	Satisfactory	
	U	Unsatisfactory	
	W	Withdrawn	

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

I : Given only when a student is unable to complete the course because of circumstances beyond his control. It must be made up by the close of the next two semesters or the incomplete grade becomes a failure. He/ She may however, be allowed to register without further payment of tuition fees for the course.

S or **U** : Satisfactory or unsatisfactory. Used only as final grade for thesis/ Project and non-credit courses. Grade for thesis or project which will be continuing shall be recorded as 'In progress'. If however, thesis is discontinued, "Incomplete" grade shall be recorded.

W : Officially withdrawn from a course. A student must withdraw officially from a course within two working weeks of the commencement of the semester or else his grade in that course shall be recorded as 'F' unless he/she is eligible to get a grade of I (incomplete). A student may be permitted to withdraw and change his/her course within the specified period with the approval of his/her adviser and Head of the department.

- 5.2 Official withdrawal: A student may withdraw from the program for a total period of Five academic years for Ph.D student and Three academic years for Masters student, on the recommendation of the supervisor (and co-supervisor, if any) with prior permission from the Head of the department, if he/she is unable to continue the program due to any unavoidable circumstances of his/her own or of the university. Such withdrawal period will be assessed as academic exemption toward article 4.1/4.2.

6. Conduct of Examination:

- 6.1 For all post-graduate degrees in Engineering/Sciences, there shall be a semester final examination, in addition to tests, assignments and/or examination during the semester as may be given by the teachers(s) concerned. The dates of such examination will be announced by the Head of the respective department at least two weeks before the commencement of the examinations. The final grade in a subject shall be based on the performance in all tests, assignments and/or examinations.
- 6.2 Each examiner will submit the final grades obtained by student(s) in each subject in prescribed form to the Head of the department. The Head of the department will appoint tabulators for each semester, subject to the approval of the Vice chancellor. Three copies of the tabulation sheet will be prepared for a semester, (i) One for the Vice chancellor, (ii) One for Controller of Examination and (iii) One for Head of the department.
- 6.3 Cumulative grades earned by a student shall be announced by the office of the Controller of Examination at the end of each semester. Students may collect a copy of transcript from the Controller of Examination at the end of each semester, on payment of the prescribed fees.
- 6.4 The respective teacher(s) of each theory course offered in a semester will be the paper setter and script examiner for the semester final examination.

7. Qualifying Requirements:

- 7.1 The qualifying requirement of the degree is that a student must earn a minimum grade point average of 2.65 for masters and 2.75 for Ph.D degree, based on the weighted average in his course work. GPA is calculated as $GPA = \frac{\sum(C_i G_i)}{\sum C_i}$, where, C_i is the credit hour in a particular subject and G_i is the grade point corresponding to the grade obtained by the student in that subject. GPA and CGPA will be rounded off to the second place of decimal.
- 7.2 The C grades up to a maximum of two subjects may be ignored for calculation of grade point average (GPA) at the written request of the student provided he/she has completed the total course credit hour requirement with a minimum weighted GPA of 2.65 in the remaining subjects. No subject shall be repeated unless it is compulsory requirement of the degree. Performance in all the subjects shall be reflected in the transcript.
- 7.3 If F grade is obtained in three or more subjects by a student, he/she shall not be allowed to continue the program.
- 7.4 At the end of the first semester, if the GPA earned by a student falls below 2.5, he/she shall not be allowed to continue the program.
- 7.5 In addition to successful completion of course work every student shall submit a thesis on his/her research work or report on his/her project work fulfilling the requirements as detailed in Articles 8. M. Sc. Engg/ M. Phil students should preferably have a publication/ paper.

8. Thesis/Project for M.Sc. Engineering/M. Engg./M. Phil degree

- 8.1 Research work for a thesis/project shall be carried out under the supervision of full time teacher who is a member of PGAC to the relevant department. A co-supervisor from within or outside the department/ University may be appointed. The tentative research proposal of thesis/project and the supervisor and co-supervisor (if any) shall be approved by the CASR on recommendation of PGAC before the completion of course work requirements of the student concerned.
- 8.2 The research work must be carried out in this University. In special circumstances it may be carried out at a place(s) recommended by the supervisor in consultation with the Head of the department and approved by the CASR.
- 8.3 A seminar shall have to be presented by M. Sc. Engg/ M. Phil student on the progress of his/her research work, within the next semester after completion of course work. The Head of the department will keep a record of it and send a report to the Vice chancellor in prescribed form.

- 8.4 Every student shall submit to the Head of the department, through his/her supervisor requirement number of type written copies of his/her thesis/project report in the approved format on or before a date to be fixed by the Head of the department in consultation with the supervisor concerned.
- 8.5 The student shall certify that the research work was done by his/her and that the same work has not been submitted elsewhere for any degree or award (except for publication).
- 8.6 The thesis/project should demonstrate an evidence of satisfactory knowledge in the field of research undertaken by the student and must be an original contribution to engineering/science and worthy of publication.
- 8.7 Every student submitting a thesis/project report in partial fulfillment of the requirement of a degree shall be required to appear at an oral examination, on a date or dates fixed by the Head of the department in consultation with supervisor and must satisfy the examiners that he/she is capable of intelligently applying the results of this research to the solution of problem, of undertaking independent work, and also afford evidence of satisfactory knowledge related to the theory and technique used in his research work.
- 8.8 Examination Committee for M. Sc. Engg./M. Phil thesis: The Head of the department, in consultation with the supervisor shall propose to the Vice chancellor for the approval of Academic council a panel of examiners for thesis and oral examination, usually one month before the date of thesis examination. The Examination Committee shall be constituted as follows.

Supervisor	Chairman	
Co-Supervisor	Member	
Head of the department	Member	
One external member from outside the University/department	External member	Two alternate names should be proposed.
One or two members from within or outside the department, not below the rank of Assistant Professor, having research experience.	Member	Three alternate names should be proposed.

- 8.9 Examination Committee for M. Engg. Project: The Head of the department, in consultation with the supervisor shall propose to the Director for the approval of the Academic council a panel of examiners for project and oral examination, usually one month before the date of project examination. The examination committee shall be constituted as follows.

Supervisor	Chairman	
Co-Supervisor	Member	
Head of the department	Member	
One external member from outside the University/department	External member	Two alternate names should be proposed.
One or two members from within or outside the department, not below the rank of Assistant Professor, having research experience.	Member	Three alternate names should be proposed.

- 8.10 If an examiner is unable to accept the appointment or has to relinquish his appointment before/during the examination, the Vice chancellor may appoint another examiner in his place in consultation with the Head of the department and the supervisor, without, further reference to the PGAC, subject to the approval of Academic Council.
- 8.11 The Head of the department will arrange to keep a record of the thesis/Project examination in tabulation sheet and send a report to the Vice chancellor in prescribed format, along with the comments of the thesis examiners. In this report he will also confirm that the student has completed the course and other requirements (if any) for the award of the degree.

9. Comprehensive Examination for Ph.D. Student

- 9.1 Every Ph.D. Student shall appear at a comprehensive examination, ordinarily held soon after the completion of the course requirements. The PGAC will form an examination committee named Doctoral scrutiny Committee (DSC) and will be constituted by the supervisor as chairman; co-supervisor, Head of the department, one teacher not below the rank of Assistant Professor from allied field of research and at least

two other teachers usually within the department not below the rank of Assistant Professor, as members. The date and time of the comprehensive examination shall be fixed by the PGAC on the request of the supervisor.

- 9.2 The comprehensive examination shall comprise a written examination and/or an oral examination to test the knowledge of the student related to the subject(s) of his research and allied field. If the student fails to qualify in a comprehensive examination, (s)he shall be given one more chance to appear in the examination as scheduled by the PGAC. The Head of the department will send a report of the comprehensive examination in prescribed form, to the Vice chancellor.

10. Thesis for Ph. D. students

- 10.1 Research work for a thesis shall be carried out under the supervision of a full time teacher who is a member of PGAC to the relevant department. A co-supervisor from within or outside the department/university may be appointed. The title of thesis and the supervisor and co-supervisor (if any) shall be approved by the PGAC before the completion of course requirements of the student concerned, on the recommendation of the Head of the department.
- 10.2 The Research work must be carried out in this university. In special circumstances it may be carried out at a place(s) recommended by the supervisor in consultation with the Head of the department and approved by the CASR.
- 10.3 A semester shall have to be presented by the student after passing the comprehensive examination. The seminar will show the evidences that the research work selected by the student is compatible towards the award of a Ph. D degree as will be evaluated by the DSC. The Head of the department will keep a record of it and send a report to the Director in prescribed form.
- 10.4 Open seminar: Before submitting the thesis, the student will present the open seminar, showing the achievements in the research towards the award of Ph.D. degree as will be evaluated by the DSC. The Head of the department will keep a record of it and send a report to the Vice chancellor in prescribed form.
- 10.5 Every student shall submit required number of copies of synopsis and Thesis in prescribed format to the Head of the department, through his/her supervisor for distribution among the members of the examination committee and the experts.
- 10.6 The student shall certify that the research work was done by him/her and that the work has not been submitted elsewhere for degree or award (except publication).
- 10.7 The supervisor, in consultation with the Head of the department, will propose a panel of 6 names of the experts in the related field of research from outside the department, at least 3 of which should be from outside the country, to the Vice chancellor.
- 10.8 The Vice chancellor will send the copies of the synopsis to the experts' proposed by the supervisor, seeking their consent to be external examiner for the thesis. On receipt of their consent, he will select two external expert members of whom one from outside the country and send the copies of the thesis to them. Expert's report should be collected in prescribed form.
- 10.9 Copies of the experts' reports may be given to the student through the supervisor, if there are any further queries to be cleared or questions to be answered by the student. Such answers should be directly sent to the expert concerned and final report should be collected.
- 10.10 The thesis should demonstrate and evidence of satisfactory knowledge in the field of research undertaken by the student and must be an original contribution to engineering/science and worthy of publication. In support of this the student should have at least two publications in journal of International standard.
- 10.11 Every Student submitting a thesis in partial fulfillment of the requirement of a Ph.D. degree shall be required to appear at an oral examination, on a data or dates fixed by the Head of the department in consultation with supervisor and must satisfy the examiners that he is capable of intelligently applying the results of this research to the solution of problems, of undertaking independent work, and also afford evidence of satisfactory knowledge related to the theory and technique used in his research work.
- 10.12 On receipt of favorable experts' report the Head of the department, in consultation with the supervisor shall propose to the vice chancellor, for the approval of Academic Council, a panel of examiners for thesis and oral examination, usually one month before the date of thesis examination. The Examination Committee approved by CASR shall be constituted with the following members as described below.

Supervisor	Chairman
Other members of D.S.C	Members
One external member from outside the university	External Member

- 10.13 If an examiner is unable to accept the appointment or has to relinquish his appointment before/during the examination, the vice-chancellor may appoint another examiner in his place in consultation with the Head of the department and the supervisor.
- 10.14 A Student who has been transferred to the Ph.D. program from the masters program may be awarded master's degree, on recommendation of the supervisor, if the student fails to qualify for the award of the Ph.D. degree. In that case that student must have to fulfill all the requirements for the said degree.
- 10.15 The Head of the department will arrange to keep a record of the thesis examination in tabulation sheet and send a report to the vice-chancellor in prescribed format, along with the comments (if any) of the members of the examination committee. In this report he will also confirm that the student has completed the course and other requirements (if any) for the award of the degree.

11. Cancellation of Studentship:

- i) Non-payment of dues within prescribed period.
- ii) Failing to proceed with the program as prescribed by this ordinance.
- iii) Failing to make satisfactory progress as reported by the adviser/supervisor through the PGAC and approved by the Academic Council.
- iv) Forced to discontinue his studies under disciplinary rules.
- v) Withdrawn officially from all the course works including thesis/project.

12. Academic Fees

Academic fees will be prescribed by the appropriate authority of the university from time to time.