

**NOORUL ISLAM UNIVERSITY**

**Kumaracoil, Thuckalay-629175**



**REGULATIONS**

**for**

**Doctor of Philosophy**

**2009**

<b>S.No.</b>	<b>CONTENT</b>	<b>PAGE</b>
1	INTRODUCTION	2
2	BOARD OF RESEARCH, DEVELOPMENT AND CONSULTANCY	2
3	Ph.D PROGRAMME PROFILE	3
4	SELECTION PROCEDURES FOR Ph.D SCHOLARS	4
5	ADMISSION	5
6	SUPERVISOR	5
7	DOCTORAL COMMITTEE	6
8	PROGRAMME STRUCTURE	6
9	PROGRAMME IMPLEMENTATION METHODOLOGY	7
10	PANEL OF EXAMINERS	9
11	SUBMISSION OF SYNOPSIS	9
12	SUBMISSION OF THESIS	9
13	THESIS EVALUATION	10
14	VIVA VOCE EXAMINATION	10
15	FINANCIAL ASSISTANCE TO Ph.D SCHOLARS	11
16	THE ACT OF PLAGIARISM	11
17	FEES STRUCTURE	11
18	AWARD OF PH.D. DEGREE	11

# **RULES AND REGULATIONS FOR DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.)**

## **1. Introduction**

a). Noorul Islam University (NIU) recognizes the importance of research in Technical Education and the development of the University. The Board of Research, Development and Consultancy (BRDC) of the university shall be the apex body to monitor and guide all research programs, including Doctoral research, with due approvals from the Board of Management (BOM) of the University. NIU offers Ph.D degree program to eligible students who are interested to doing research studies on full time or part time basis.

b). These rules and regulations, govern the Ph.D program profile, the selection procedure, admission, appointment of supervisors, Doctoral Committee, program structure, implementation methodology, evaluation of research and award of the degree etc. These rules and regulations are effective for the batches of students admitted from the academic session 2009-2010 onwards.

c). Doctoral programme leading to Ph.D. is offered in the following disciplines.

- i). Department of Computer Science and Engineering
- ii). Department of Electrical and Electronics Engineering
- iii). Department of Electronics and Communication Engineering
- iv). Department of Mechanical Engineering
- v). Department of Electrical and Instrumentation Engineering
- vi). Department of Management Studies
- vii). Departments of Science and Humanities
- viii). Department of Aeronautical Engineering
- ix). Department of Information Technology
- x). Department of Computer Applications
- xi). Department of Software Engineering
- xii). Department of Nano Technology

d). The provisions of these rules and regulations shall be applicable to any new disciplines that are introduced from time to time and added to the above list.

e). Notwithstanding any of the clause(s) provided in the rules and regulations, the Board of Management (BOM) shall exercise its powers to change/amend/ interpret / implement decisions and actions concerned with academic matters, based on the recommendation of the BRDC.

## **2. Board of Research, Development and Consultancy (BRDC)**

a). The Research, Development and Consultancy Board shall be responsible for the enhancement of the research and consultancy activities of the University.

b). The composition of BRDC shall be:

- i). Pro-Chancellor - Chairman
- ii). Vice-Chancellor - Vice Chairman
- iii). Registrar - Member

- iv). Deans of Schools - Member
- v). Director Research – Member Secretary
- vi). Six External Experts Nominated by Chancellor Member

c). The BRDC shall

- Formulate the regulation and procedures for research, development and consultancy programmes.
- Identify R&D thrust areas within the frame work of vision and mission of the University.
- Finalise R&D tie-ups with National and International bodies.
- Plan, initiate, review and oversee the research activities.
- Evolve and implement multi-institution and multi- disciplinary programmes, utilising the infrastructure and resources of the University gainfully.

d). BRDC shall administer the Doctoral program through the Registrar of the University.

### 3.Ph.D Programme Profile

#### 3.1. *Qualifications*

a). The qualifications for admission to the Ph.D programs under the Engineering discipline, Science & Humanities discipline and Management discipline are given below.

Sl.No	Programme	Qualification for Admission
1.	Ph.D. Degree in Engineering/Technology/ Architecture and Planning.	M.E/M.Tech./M.S or equivalent degree in the relevant branch of Engineering/Technology with minimum 60% or equivalent grade.
2.	Ph.D. Degree in Science and Humanities	M.Sc/M.C.A./M.A./M.S or equivalent degree in the relevant branch of Science and Humanities with minimum 60% or equivalent grade.
3.	Ph.D. Degree in Management Studies	MBA/M.S or equivalent degree in the Management Studies with minimum 60% or equivalent grade.

b). All degrees above must be from AICTE/UGC approved Institutions.

#### 3.2. *Categories*

The PhD Scholars are categorised into 3 groups as given below.

##### a). **Full-time Scholars**

Full time Scholars shall function along with other faculties of Noorul Islam University and shall do research work in the University on a full time basis for PhD

and shall be available during the working hours for part time curricular, co-curricular and related activities.

**b). Internal part-time Scholars**

All faculties employed in Noorul Islam University and actively involved in teaching / research / development as part of their regular work can be part time Scholars for PhD in relevant areas.

**c). External part-time Scholars**

Faculties sponsored by UGC, AICTE approved academic institutions and candidates sponsored by R & D organizations and Industries having R & D facilities, can be part time Scholars for Ph.D.

**3.3. Duration**

The duration of the Ph.D. programme and the time limit for submission of thesis are counted from the date of provisional registration and given below for different categories of PhD Scholars.

Sl.No	Category	Duration	
		Minimum	Maximum
1.	Full Time	Three Years	Five Years
2.	Part Time (Internal)	Four Years	Six Years
3.	Part Time (External)	Four Years	Six Years

**4. Selection procedures for Ph.D Scholars**

a). The candidates desirous of joining for the Ph.D. degree programme should apply in the prescribed application form through proper channel wherever applicable before the due date as indicated in the notification issued from time to time. Normally, the University will issue notification for Ph.D. admission twice in a year.

b). There shall be a Ph.D selection committee, nominated by Chairman BRDC, under the chairmanship of Director- Research, to process all the applications from the beginning till the final selection.

c). All candidates shall appears for an entrance examination for Ph.D program followed by an interview. However, all candidates who have been assessed by recognised national agencies (like CSIR/UGC/GATE, etc) are exempted from the entrance from the common entrance test. Those who have M.Phil are also exempted from the entrance test. All these exempted candidates will be interviewed and entrance mark will be based on assessment mark obtained in CSIR/UGC/GATE/M.Phil, etc.

d). Candidates shall be short listed based on the overall merit index of the candidate which will be arrived at by taking into account the candidate's performance in the previous

university examinations at Bachelor's and Master's level and the performance in the entrance test and the interview.

e). For such short listed candidates, the selection committees shall nominate the Ph.D supervisors, taking into consideration the area of research of the candidates and the field of specialization of the supervisors eligible to guide and forward the same to the BRDC for approval.

## **5. Admission**

Candidates whose selection is approved by BRDC will be admitted to the Ph.D. programme after payment of prescribed fees. The candidate should also pay fees every year as prescribed by the university, failing which registration will be cancelled.

## **6. Supervisor**

### ***6.1 Selection of Supervisor/Joint Supervisor***

All PhD Scholars must select a qualified and experienced expert from among the faculties in NIU as Ph.D Supervisor depending upon the topic of research. In addition the scholars may select a Joint Supervisor from external institutions with due approvals of BRDC. In cases where suitable faculty is not available in NIU, the Scholar may select an external Supervisor but there must be a research coordinator from among the faculties of NIU to administer the PhD program in the University.

### ***6.2 Recognition of Supervisor***

- a). The applicant for supervisor should have Doctoral degree.
- b). The applicant shall specify the areas of research in which he / she proposes to guide the research scholar.
- c). The applicant shall have a minimum of two publication to his / her credit in referred International Journal.
- d). Recognition as supervisor for guiding research work shall be accorded by the BRDC.
- e). Joint-Supervisor shall be recognised by BRDC in special cases, depending upon the topic, subject and area of research.
- f). A Supervisor shall entertain fresh registration of candidates even after his / her retirement from service.
- g). Applicants who are already recognised as Ph.D Supervisors by AICTE / UGC recognised institutions shall be eligible for recognition
- h). In addition, all faculties of NIU who have a PhD degree shall be recognised as PhD Supervisor subject to each one of them having two publications in referred International Journals within two years of their recognition, failing which their recognition shall be withdrawn.

### ***6.3. Change of Supervisor***

- a). Change of research Supervisor / guide shall not be permitted as a matter of course. In exceptional cases such changes may be permitted provided by Chairman BRDC where,

- The research guide under whom the candidate has originally registered gives a “No Objection Certificate”.
- The new guide gives a “Certificate of Willingness” to guide the candidate for the remaining period of research.

b). In case the “No Objection Certificate” is not obtainable, the case shall be considered and decided by BRDC on its merit.

c). If there is a change of research guide and not the topic, then the date of registration will not change.

#### **6.4. Number of Scholars under a Supervisor**

The total number of scholars registered for the Ph. D, Degree, including part-time scholars, at any point of time shall not exceed eight in the case of a supervisor.

### **7. Doctoral Committee**

a). Separate Doctoral Committee will be appointed for each Research Scholar to consider his research proposal, to prescribe the course work required to be undergone by the candidate, to continuously monitor the progress of the research scholar and to advise midcourse corrections wherever needed.

b). The following shall be the composition of the doctoral committee:

- i). Chairman, BRDC of the university or his / her nominee as Chairman
- ii). Research guide -Member (convener)
- iii). Co-guide (if any) -Member
- iv). One expert in the relevant area of research nominated by BRDC.
- v). HOD of the concerned Department.

c). The doctoral committee shall meet at least twice in the year for the first three years and twice in 6 months thereafter.

### **8. Programme Structure**

#### **8.1 Academic Requirement**

a). All research scholars shall successfully complete four courses, totalling 12 credits and 2 seminars with additional 6 credits, prescribed by the Doctoral committee. In the case of candidates with M. Phil qualification from recognized institutions, the number of course work shall be limited to two with a total of 6 credits and 2 seminars with additional 6 credits. The pass criteria for these courses and seminar shall be as applicable to the PG programs in the University.

b). Among the above four courses for research scholars, one shall be on research methodology which will be excluded for M.Phil degree holders and another on direct study. The other two courses shall be from among the PG courses in relevant subjects offered in the university. The two seminars shall be under the guidance of the Ph.D supervisor.

c). The part time scholars shall be given course lectures during the last four weeks of a semester to cover their course work and residential requirement. This shall be limited to one course at a time and exclude the direct studies.

d). The prescribed course work shall normally be completed within one year from the date of provisional registration in the case of full-time research scholars and two years in the case of part-time research scholars.

e). In additional, all Ph.D scholars are required to complete the course on communication skills, compulsorily whose credits shall not form part of the minimum credits requirement for the Ph.D programme. However, scholars who have already successfully completed the above course during their M.Phil program are exempted from this requirement.

f). The evaluation pattern and scheme for each prescribed course will be same as in of PG courses with (CIA) for 40 marks and end semester assessment (ESA) in end semester university examination for 60 marks. Attendance, assessment and other records will be maintained by the course teacher and handed over to the HOD as per the PG regulations.

g). Prescribed course and direct study syllabus shall be formulated by the guide, finalised by the Doctoral Committee and approved by chairman BRDC.

d). No change in the course works prescribed shall be made without the approval of the Doctoral Committee.

e). Only courses taken after the date of provisional registration shall count towards this requirement.

f) The BRDC may review applications from Scholars and transfer credits, if eligible, for courses done prior to registration.

g). A research scholars, who fail to successfully complete prescribed courses may be given one more chance to attend and complete successfully. If the research scholar is still not successful, it shall be referred to the Doctoral Committee for a decision.

## ***8.2 Attendance***

Each full time scholar shall sign in the attendance register on all working days. They are eligible for a eight days leave every semester subjected to a total maximum of fifteen days in a year, which they can avail after recommendation from the guide/co-guide and approval from the concerned HOD.

## **9. Program Implementation Methodology**

The research towards PhD degree may be carried out at NIU or in recognised external institutions. However the assessment and evaluation process and procedures for award of degree shall be common to all full time and part time scholars irrespective of the place of research.



### ***9.1. Student Status***

With the recommendation of the supervisor and Director Research, full time research may be converted to part time and vice-versa after the approval of chairman BRDC.

### ***9.2. Preliminary Examination***

a). Immediately after the successful completion of the course work, the BRDC will nominate a committee to conduct a comprehensive oral examination for every Scholar. Based on the performance of the candidate, the committee will decide to permit either to proceed with thesis work or to reappear.

b). If a Research Scholar fails in the comprehensive examination in the first attempt, he or she may be allowed to appear once again, not earlier than four months and not later than six months from the date of the first examination. If the Research Scholar does not pass in this attempt also, his / her registration may be cancelled administratively by the Director-Research.

### ***9.3. Monitoring Progress of Candidates***

a). Every six months commencing from the date of provisional registration, the candidate shall submit progress report in the prescribed format to the Supervisor who shall forward it through HOD to the Director- Research for information and documentation.

b). The Supervisor shall arrange a presentation by the research scholar on his / her work twice a year before the Doctoral Committee which is open to all faculty members and research scholars.

### ***9.4. Extension of Duration***

In exceptional circumstances, based on the recommendations of the Doctoral committee, the Chairman BRDC may permit extension of the duration of the program. Such extensions shall be limited to 2 years.

### ***9.5. Cancellation of Registration***

a). The registration of a research scholar who has exceeded the maximum period stipulated for the Ph.D. programme shall stand cancelled.

b). The registration is liable for cancellation administratively by the Director (Research), if

- The research scholar has not paid the semester fees within the stipulated time.
- The progress reports are not submitted consecutively twice or the reports are not satisfactory.
- The Doctoral committee recommends for cancellation based on assessment of the progress of research.
- The research scholar applies for cancellation.

In all the above cancellation cases, the fees paid by the research scholar shall not be refunded.

### **9.6. Temporary Break from Ph.D Programme**

Ph.D. scholars completing their course work shall be permitted to take a temporary break from the programme for a maximum period of one year on valid reasons subject to the recommendation of the DC and the approval of the Chairman BRDC.

### **10. Panel of Examiners**

- a). The thesis shall be referred for review to two examiners (one foreign and one Indian ).
- b). The following guidelines shall be followed while deciding the panel of examiners.
  - i. The examiners must hold Ph.D. in the relevant area of research.
  - ii. They must be in the level of reader / professor in AICTE/UGC approved institutions.
  - iii. Indian examiners should be from universities/ colleges /research institutions.

### **11. Submission of Synopsis**

- a). The synopsis shall be accepted only when the research scholar has at least one papers either published or accepted for publication in a referred International journal and successful completion of the course work.
- b). The candidate shall submit six hard copies and six soft copies in CD form of the synopsis through the guide and Director - Research to the Doctoral Committee. This synopsis (not exceeding twenty pages) is to be submitted by the candidate three months in advance of the probable date of the actual submission of the thesis.
- c). The research scholar shall present the synopsis before the Doctoral Committee, in the department with the participation of faculties and research scholars for getting the feed back and comments which shall be suitably incorporated in the thesis by the Doctoral Committee. With the approval of Doctoral Committee, the six copies of the synopsis shall be forwarded all the above copies of the approved synopsis to the University along with a panel of at least six names of thesis examiners, three from India and three from abroad.

### **12. Submission of Thesis**

- a). Six copies of thesis shall be prepared in accordance with the format and specifications prescribed by BRDC. These shall be submitted to the University within three months from the approval of the Synopsis by the Doctoral Committee. Under no circumstances, the thesis submission can be delayed except under extra ordinary special circumstances, where an extension of three months may be permitted by chairman BRDC based on the recommendation of the Doctoral Committee.
- b). The thesis shall include a certificate of the supervisor from the University as prescribed, to the effect that the thesis is a record of the bonafide research work carried out by the research scholar under his / her supervision and guidance and that the work reported in the thesis has not been submitted elsewhere for a degree or diploma.

### **13. Thesis Evaluation**

- a). The Vice Chancellor shall consider the panel of 6 examiner, 3 Indian and 3 foreign examiners already received from the Doctoral committee and constitute a Board of two examiners consisting of one from each of the above categories.
- b). The Vice Chancellor shall nominate any one of the examiner who had evaluated the thesis as an External Examiner for conducting Ph.D. viva voce.
- c). All the examiners shall send their reports to the Director-Research by name through e-mail and in addition as hard copy in the format supplied by Director –Research.
- d). If both examiners recommend rejection, the candidate shall carryout further research for one more year and submit the thesis after due recommendations by the Doctoral Committee. Fresh panel of examiners shall be constituted by the Vice Chancellor to evaluate the thesis.
- e). If one examiner recommends award of the degree and the other examiner recommends revision, the thesis should be revised on the lines of the report of the examiner who asked for revision. The revised thesis will be sent to the evaluation, if he/she has accepted to evaluate the revised thesis. Otherwise the revised thesis will be sent to a third examiner nominated by Vice Chancellor for evaluation.
- f). If one examiner recommends award of the degree and the other examiner rejects, the thesis shall be sent to a third examiner, nominated by Vice Chancellor. If the thesis rejected again, the matter will be referred by BRDC for decision.
- g). Once the University comes up with the decision as “Revision and Resubmission” of the thesis, the guide/guides shall be requested to direct the student to revise and resubmit the thesis after three months but within a period of one year from the date of intimation of the same. Copies of the reports of the examiners shall be made available to the candidate for carrying out the corrections.

### **14. Viva Voce Examination**

- a). If both examiners recommend award of the degree to the candidate, the candidate will be required to defend his thesis in a public viva voce Examination. The following shall be the composition of the viva voce Board.
  - i) Chairman, Nominated by Vice Chancellor.
  - ii) PhD Supervisor -Member convener
  - iii) Co-guide (if any) -Member
  - iv) One expert in the relevant area of research approved and nominated by the BRDC.
  - v) HOD of the concerned Department.
- b) The viva voce shall be conducted in the University and shall be open to all researchers in the relevant areas in the University and associated institutions, if any.
- c). If the viva voce board declares the performance of the research scholar as not satisfactory, he/she may be asked to reappear for viva-voce examination at a later date (not earlier than

three month and not later than six months from the date of the first viva voce). On the second occasion, the viva voce board will be expanded by adding additional members by the BRDC. If the board again declares the performance as not satisfactory, the matter shall be referred to BRDC for decision.

### **15. Financial Assistance to Ph.D Scholars**

Applicants having required grading in national qualifying examination like CSIR/UGC JRF, NET GATE, etc will be getting assistance ship from the respective agencies. Other applicants who are admitted to full time Ph.D programs of the university, will be considered for the University's financial assistance in the form of Teaching / Project / Research Assistantships/ Scholarship. The selected candidates are required to contribute to the programs of the University on a part time basis under the guidance of their supervisors/ HODs.

### **16. The Act of Plagiarism**

In the case of research scholars who have copied and included any dissertation / thesis / book for M.Phil. / M.S. or Ph.D. Degree in their thesis shall forfeit their thesis and their research registration shall be terminated in this University. They also shall be debarred to register for any other programme in this University.

### **17. Fees Structure**

<b>Sl.No</b>	<b>Particulars</b>	<b>Fees</b>
1.	Fees per year (from the date of registration until the submission of the thesis)	20,000
2.	Fees for course work & certificate	3000
3.	Fees for thesis submission	10,000
4.	Fees for viva-voce examination	10,000

### **18. Award of Ph.D. Degree**

If the report of the viva voce is satisfactory, the candidate will be awarded the Ph.D.Degree by the University with the approval of the Board of management of the University.

-----