

Ph.D. PROGRAMME REGULATIONS



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REGULATIONS

1. GENERAL

1.1. The Institute shall provide facilities for research leading to the Degree of Doctor of Philosophy (Ph.D.).

1.2. The award of the Ph.D. degree shall be made on the basis of satisfactory performance of a registered candidate in

i. prescribed course work & seminar and
ii. the examination on thesis submitted by the candidate and a final viva voce. The thesis shall be the report of research work characterized by either discovery of new facts or a new interpretation of known facts and theory, or an independent design and development, or development of new instrument/technology.

1.3. i. Minimum qualification required for admission to the Ph.D. program is a degree in anyone of the areas given below:

M. Tech (Master of Technology) or equivalent for Ph.D. (Engg.)

M. Sc (Master of Science) or equivalent for Ph. D. (Sc.)

MA or equivalent for Ph. D. (Arts.) OR

An equivalent of the aforesaid degrees, as to be accepted by the institute.

All candidates seeking admission to the Ph. D. program shall have to possess requisite marks/grades in qualifying examination as shown below:

A. 60% marks (or a CGPA of 6.5 in 10 point scale or 3.25 in 5 point scale) in the qualifying examination in Engineering/Science or

B. 55% in Humanities or Social Sciences (or a CGPA of 6.0 in 10 point scale).

ii. With M. Tech or equivalent qualifying degree the admitted student will also be given assistantship. Candidates who have merely qualified in NET examination but have not got a fellowship will not qualify for Institute Research Scholarship.

iii. Full time faculty of NIT Arunachal Pradesh may enroll for Ph. D. With self-guide.

iv. A teacher of this Institute can be a registered candidate under any faculty if she/he is eligible for Ph.D.

v. Ph. D. by good number of publication (at least three peer re- viewed journal).

vi. Ph. D. on distance enrollment procedure.

1.4. Normally, a candidate has to devote at least three years for study and research. The period will be counted from the date of his enrolment.

2. ADMISSION

2.1. The admission of a candidate to the Ph. D. program shall be based on recommendation by the **Departmental Research Committee** abbreviated as (**DRC**), of the Department/Centre concerned.

2.2. Candidates who possess qualification as laid down in 1.3 above are eligible for admission to the Ph. D. program on the basis of

i. Overall academic career AND

ii. Test and Interview conducted by the Department/Centre with the weightage.

A candidate who has obtained research scholarship on the basis of NET fellowship examination will be evaluated on the basis of (i) and (ii) above only.

2.3. Foreign nationals possessing the requisite qualifications and sponsored by the Govt. of India (ICCR, HRD etc.) With Scholarship are admitted on the basis of grades or marks obtained in the qualifying examination. A minimum of 60% marks or a CGPA of 6.5 (out of 10) at the qualifying examination is required in such cases.

3. ENROLMENT

3.1. i. A candidate is required to enroll for the Ph.D. program within 1 month after payment of prescribed fees and to carry out research work under a supervisor amongst the faculty of the Institute.

ii. A Research Scholar, including a faculty member enrolled for Ph.D. programme, must have a Supervisor, though he/she may be exceptionally good academic background having research exposure.

iii. When a research scholar is permitted by the BoR (Board of Research) on the recommendation of the **DRC (Departmental Research Committee)** to carry out a substantial part of the research work in an industry or in an organization with adequate R & D facilities, appointment of a joint supervisor from the industry/organization may be allowed provided that such permission shall not violate the condition for continuity of

research scholarship of an Institute Research Scholar. The qualification of the joint supervisor from the industry/organization shall have to be approved by BoR.

3.2. Enrolment and recommended course work.

A newly admitted research student has to enroll for the Ph.D. programme within one month of provisional registration. For enrollment, the student makes an application stating the broad area of research and providing his/her academic background. The **DRC** considers the application and recommends a set of course work for the student. The recommended course work normally complements the student's academic strengths with the core and the advanced methodological skills needed for the research work. The recommended course work is as under:

- i. English for Technical Writing (Compulsory)- (ON LINE / Distance Mode is permitted)
- ii. One from the list of Interdisciplinary Subjects-(ON LINE / Distance Mode is permitted)
- iii. A list of subjects at the post-graduate level with a total credit loading as under:

A. For a student admitted on the basis of M. Tech. or equivalent degree, the lower and the upper limits (including the interdisciplinary subject) are

Lower Limit: 10 Credit

Upper Limit: 20 Credit

B. For students admitted on the basis of M. Tech. or equivalent degree in who had done their qualifying degree 8 years before the admission, the lower and the upper limits (including the interdisciplinary subject) are

Lower Limit: 20 Credit

Upper Limit: 40 Credit

C. For a student admitted on the basis of M. Sc. or equivalent degree in, the lower and the upper limits (including the interdisciplinary subject) are

For new candidate: Lower Limit: 15 Credit

Upper Limit: 25 Credit

For old candidate: Lower Limit: 30 Credit

Upper Limit: 50 Credit

Enrolment of a student for the Ph. D. programme is completed after the BoR approves the enrollment based on recommendations of the **DRC**. The fellowship for an Institute

research student is released after a student is enrolled for Ph. D. In deserving cases, the size of course work may be limited.
iv. A mandatory short course on Research Methodology for maximum 150 hours.

4. ADMISSION REQUIREMENTS FOR Ph.D. PROGRAM (Vide para 2.2 and 2.3 of the Regulations)

4.1. Candidates possessing qualification as given in para-1.3 i or 1.3 ii are to be selected for admission to the program on the basis the following weightage:

i. Overall academic performance	. . . 70 per cent	and ii.
Test and Interview conducted	. . . 30 per cent	by the Department/Centre/School.

5. ADMISSION OF SPONSORED CANDIDATES TO Ph.D. PROGRAM (Vide para 2.3 of the Regulations)

The Institute may admit persons who are in gainful employment as Sponsored Scholars to the research program subject to the following conditions:

5.1. Persons who possess the minimum prescribed qualifications and are in service in any of the following establishments shall be eligible for admission to the Ph. D. program as sponsored scholars:

- i. defence or other ministries of the Government of India or any other government organizations;
- ii. established industrial research and development organizations;
- iii. autonomous bodies and public undertakings;
- iv. universities/colleges;
- v. such industries as may be recognized by the Institute for the purpose from time to time.

5.2. Besides the sponsored candidates from the above organizations, qualified teachers from recognized Engineering Colleges selected under the Quality Improvement Program (QIP) of the Govt. of India and of Science Colleges who are awarded Teacher Fellowship of the University Grants Commission shall be eligible for admission to the program.

5.3. An intending sponsored candidate must submit his application in prescribed form for admission through his employer, who will forward the same to the Institute with suitable endorsement so as to reach the Institute by the date

stipulated in the notification for the semester.

5.4. At the time of joining the Institute a sponsored scholar selected for admission shall be required:

i. to submit evidence of having passed the qualifying examination and such other documents as the Institute may require,

ii. to produce certificate from the employers to the effect

A. that he has been officially released from his duties for purpose of joining the program and has been granted the leave for the required period,

B. that his services shall be retained with the employers.

iii. A candidate in service shall produce a release certificate from his/her employer at the time of admission.

5.5. Subsequent to his joining the Institute as a sponsored research scholar and during his tenure here, if the sponsoring authority puts him on leave without pay or half pay, he/she will be treated as self-supporting candidate and he/she will not be eligible for any scholarship.

5.6. i. A candidate sponsored by an industry, an R&D Organization, educational institution

Or

A Government Organization having adequate research facilities may be allowed to work externally subject to his fulfilling all such conditions prescribed by these Regulations as are applicable. Permission to carry out the research work partially or entirely at the Organization shall be granted only if the ~~DC~~ **DRC** is satisfied about availability of research facilities there and fulfillment of all requirements.

ii. Such permission is to be obtained in advance.

iii. In such a case a joint supervisor from the sponsoring Organization with adequate research experience may be appointed with the approval of **DRC**. When a sponsored candidate has been granted permission under these provisions to work externally at the parent organization he will be required to maintain frequent contact with the supervisor in the Institute.

5.7. No candidate shall normally be allowed to change the category under which he/she is enrolled.

6. TERMS AND CONDITIONS FOR AWARD OF INSTITUTE RESEARCH ASSISTANTSHIP

6.1. All Research Scholars admitted to the research program, except the sponsored scholars and members of staff of the Institute, shall be entitled to award of Institute research assistantship subject to the terms and conditions laid down below. All Institute Research Scholars will have to possess a GATE score that is above the cut off level as decided by the ~~DC~~ **DRC** from time to time. On the question of cut-off point of GATE percentile in the matter of award of Institute Research Fellowship, particularly when M. Tech. courses may not have been offered by a Department/Centre in a particular year, and in the cases of Science Departments where M. Tech. Course is not offered in any discipline, the minimum GATE score shall be as per **DRC** guidelines.

6.2. A person who is employed in the Institute temporarily under a project or scheme or who enjoys an outside Scholarship other than QIP/TF, and who has been registered for the Ph. D. degree may be granted, on the recommendation of the **DRC** Institute Research assistantship subject to conditions of the rules as and when he/she not getting fellowship from any outside agencies and / or not in temporary job in the Institute. However, the total period of the scheme service enjoyed and the Institute assistantship together should not exceed 4 years. Transfer from CSIR/UGC etc., individual fellowships and from research projects to Institute Scholarship will be guided by the following:

- i. One must have completed at least 2 years in a research project or scheme.
- ii. Individual research scholars from external funding agencies like CSIR/UGC/ICAR etc., must have completed 3 years as Individual fellows.
- iii. The candidates will present their work done so far for his/her Ph.D. at an open Seminar with the BoR and **DRC** present and the **DRC** will satisfy itself that the case is deserving. The candidate must be GATE/NET fellowship qualified.
- iv. Such a case can be considered only if the fellow has been registered for the Ph.D.
- v. All other rules applicable for selection of regular Institute scholars would apply.

6.3. Value of Assistantship:

The value of the Institute Research Assistantship shall be as per MHRD norms.

- i. The value of Research Scholarship of a registered candidate may be recommended for enhancement by the BoR after completion of one/two years of continuous research work based on existing guidelines and on the basis of a written report and a seminar lecture given to an open audience with members of **DRC** present.
- ii. In the event of the BoR being not satisfied with the progress of a Scholar during the preceding two years it may recommend suspension of enhancement in the value of the assistantship for such period, as it deems appropriate. The Committee will reassess the candidates work after the period so fixed and if the enhancement is recommended, indicate the date from which the enhanced value will be effective.
- iii. Contingency Grant will be as per MHRD guidelines

7. TENURE

7.1. The assistantship shall be payable from the date the scholar joins the Institute. At the initial stage the order for payment of assistantship shall, however, be issued when the scholar is enrolled formally.

7.2. The assistantship for the last month shall be payable subject to foregoing conditions up to the actual date of the scholars leaving the Institute. The disbursement of last monthly installment of assistantship shall be made, on production of a No Dues certificate from the Hall of Residence, the Library and the Department/Centre.

7.3. Notwithstanding anything contained in the foregoing subparagraphs, continuation of assistantship from month to month is subject to candidates good conduct and continuous progress of research work to the satisfaction of the Supervisor(s), the Head of the Department/Centre and other authorities.

8. SUPERVISION

8.1. i. The supervisor of a Registered candidate shall be a teacher of this university holding a doctorate degree with at least one year experience after of completion of his/her doctoral degree.

ii. A. In special cases, interdisciplinary subjects and joint supervision, the Doctoral Committee may appoint a Supervisor

from outside this University. A Teacher/ Scientist from any University / Institute who wishes to supervise a registered candidate of this University for the first time has to apply in the prescribed form forwarded by the head of the institution, and this application is to be approved by the **Department Research Committee**.

B. The **Department Research Committee** may appoint a supervisor from the Officers of the University holding a Doctorate degree and possessing adequate research experience as evidenced by publications provided that if the officer her/himself is registered for the Ph. D. degree, she/he shall not be eligible for appointment as Supervisor till she/he is awarded the degree.

9. SUBMISSION OF THESIS

9.1. i. A registered candidate shall have to work for a minimum period of two years after registration. If the Supervisor certifies that the candidate has carried on research for two years and that the thesis embodies at least two years work, then the **Department Research Committee** may permit a candidate to submit his/her thesis one year after the successful completion of coursework.

ii. A student must have at least 3 (three) publications in a refereed journal out of his/her doctoral research work prior to submission and shall produce evidence for the same in the form of acceptance letter or offprint to the **Department Research Committee**.

iii. Before final submission of the thesis a student who has satisfactorily completed the course work following clause 3.2, must present his/her work at a meeting of the Ph.D. Research Committee (BoR & **DRC**). Interested researchers may also attend the meeting as invitee. Any suggestion may be suitably incorporated under the advice of the supervisor(s).

9.2. i. In exceptional cases a whole-time employee of this University may apply to the **Department Research Committee** for permission to submit a thesis for the degree of Doctor of Philosophy without any supervision.

ii. Such an application shall be made through the Head of the Department/Director of School of the subject to which the subject matter of the thesis relates.

iii. The **Department Research Committee** may grant the

permission if it is satisfied that the applicant has carried on research for at least two years based on list of publications. Upon granting of permission and the payment of the registration fee, the names of such applicants shall be entered in the register of candidates for Ph.D. degree of relevant faculty. Requirements, such as course work and evidence of publications in refereed journals, or any other as may be notified from time to time should be fulfilled and noted in the record of the candidate. On permission from the **Department Research Committee**, the candidate may submit her/his thesis according to the regulations.

- 9.3. i. The thesis shall be an original contribution to knowledge, and must bear evidence of the candidates having carried out individual investigations in her/his chosen field.
- ii. She/he shall state in the preface on which the work is based and how the work contributes to the general advancement of knowledge. She/he shall also state the sources from which her/his information has been derived and shall indicate which portion(s) of her/his thesis she/he claims as her / his original contribution.
- iii. A candidate cannot submit her/his thesis for the award of any other degree or diploma or other academic award.

10. EXAMINATION OF THESIS

(a) The **Department Research Committee** shall approve names of six persons who are well known authorities on the subject for appointment as examiners of a thesis by considering the list submitted by the Supervisor(s). Such examiners shall neither be teachers of this University nor persons who are supervising candidates for the PhD degree registered at this University.

(b) On recommendation of the **Department Research Committee**, a Board of Examiners, consisting of two external experts and the supervisor(s) under whose guidance the candidate worked, shall be appointed by the Senate/Director of which at least one external expert shall ordinarily be from outside the country.

(c) External examiners will be requested to state their opinion in the prescribed form that has the following provisions:

- i. The candidate may be awarded the Ph. D degree of the University

ii. The candidate may be awarded the Ph. D degree of the University provided that the following modifications are addressed in a separate addendum. The Examiners present at the viva voce must certify that the modifications are satisfactorily addressed, failing which the thesis must be resubmitted after addressing the suggested modifications.

iii. The candidate may be awarded the Ph. D degree only after addressing the following questions and resubmitting the thesis.

iv. When the candidate will not be recommended for award of Ph D degree of this university, a detail report duly signed by the examiner may be submitted to the Institute

(d) A thesis which has been directed to be resubmitted by at least one of the external examiners may be submitted again after due revision, modification or alteration but not earlier than three months from the date of communication of the recommendation to the candidate and a fee shall have to be paid at the time of resubmission as decided by the University. External examiners appointed under (ii) will examine the resubmitted thesis again. A thesis may be resubmitted only once.

(e) If there is a difference of opinion in the recommendations (clauses

10 (c) (i) to (iii) vis--vis (iv)) of the external examiners, all the reports and the thesis will be sent to a third external examiner appointed by the **Department Research Committee (DRC)** who will act as special adjudicator and her/his recommendation will be considered as binding.

(f) If both the external examiners reject the thesis (clause 10 (c)(iv)), it shall not be further processed for award of the Ph. D degree of this University and it will be considered as not admitted.

(g) If the external examiners are of the opinion that the candidate may be awarded the degree (clauses 10 (c) (i) & (ii)) or in case of a favorable opinion of the special adjudicator, he/she shall be asked to appear at the viva voce examination.

11. VIVA VOCE EXAMINATION

11.1. There shall be an open viva voce examination for which notice should be issued 15 (fifteen) days before the examination and teachers of all faculties shall be invited to attend the examination. Other interested persons may also

attend.

11.2. The Senate on recommendation of the **Department Research Committee (DRC)** shall appoint one expert who is not a teacher of this University and is a well-known authority on the subject, and the Supervisor(s) of the candidate, as examiners for the oral examination. In case the Supervisor is not available, the University shall appoint another examiner in her/his place.

In the event of a Ph.D. candidate proceeding abroad after submission of the thesis, two competent scholars in the field abroad may be appointed as an examiner for the open viva voce as a special case with the approval of the Director.

11.3. The examiners at the oral examination may ask questions beyond the subject of the thesis in order to satisfy themselves that the candidate has adequate knowledge of the particular branch of the subject on which s/he has submitted the thesis. If there is an addendum as mentioned under 10 (iii) (b), the examiners will certify that it is satisfactory.

11.4. If the examiners are not satisfied, the candidate may be directed to appear again at the viva-voce examination after six months. Such a candidate shall pay an additional fee duly determined by the University.

12. On completion of all stages of examination, a report may be placed before the senate for consideration of award of Degree.

13. HONORARIUM

The members of the Board of Examiners shall be paid an honorarium of US\$200 for external experts and Rs. 4000/- for internal expert by the University for the Examination of the thesis and the oral examination separately. Honorarium will be paid to the examiners at the same rate as mentioned above for re-examination of the thesis.

14. Director, the Chairman of senate on advice of Dean (R&D) may apply discretionary authority as and when required in interest of the Institute.