

# National Institute of Electronics and Information Technology(NIELIT)

(Institution Deemed to be University under Distinct category)

Main Campus: Bada Phull, Ropar (Roopnagar)- Punjab 140001

## REGULATIONS FOR Ph.D PROGRAMME

(Effective from the Session: 2024-2025)

APPROVED BY

The Executive Council in its meeting held on

\*\*\* Campuses \*\*\*

**North**  
Gorakhpur  
Patna  
Ropar  
Srinagar

**North-East**  
Agartala  
Aizawl  
Imphal  
Itanagar  
Kohima

**West**  
Ajmer  
Aurangabad

**South**  
Calicut

## 1. Short Title and Commencement

- (a) These Regulations may be called **the NIELIT Deemed to be University (Ph.D. Regulations, 2024)**.
- (b) It shall come into force from the session 2024 – 2025.

## 2. Definitions

- a. **"Academic Year"** An academic year, for scheduling and managing various activities of scholars is defined from 1st July to 30th June.
- b. **"Applicant"** shall mean an individual who applies for admission to the Ph.D. programme of the NIELIT Deemed to be University (hereafter referred to as NIELIT) on a prescribed application form as notified in the University prospectus.
- c. **"Course Work"** shall mean courses of study prescribed by the Research Advisory Committee through the Supervisor to be undertaken by a student registered for the Ph.D. Degree.
- d. **"Dean, Faculty of Study"** shall mean the Dean, Faculty of Study of NIELIT
- e. **"Degree"** shall mean the Doctor of Philosophy (Ph.D.) of the NIELIT.
- f. **"Educational Institution"** shall mean those recognized colleges/institutions/ universities which offer Bachelor's Degree or higher.
- g. **"Faculty Member"** shall mean Assistant Professor/ Associate Professor/ Professor of the NSUT, including re-employed Professor, Visiting Professor, Emeritus Professor, Adjunct Professor, Professor of Eminence, Honorary Faculty/Professor, etc.
- h. **"Registration Period"** shall mean the length of the period commencing with the date of provisional registration at the University till the completion of the Ph.D. programme.
- i. **"Research Scholar"** shall mean a person registered for the Ph.D. programme of the University.
- j. **"Second Work Place"** shall mean a Research Laboratory/Research Centre/Research & Development Organization/ Academic Institute/ Faculty of Studies/ Centre for Advanced Studies and Research /Industry/Government Department/Public Sector Undertakings approved as the second workplace of any Research Scholar by NIELIT for carrying out research work wholly/partly leading to the degree of Doctor of Philosophy of the University.
- k. **"Supervisor"** shall mean a Faculty Member of the NIELIT approved to supervise the research/academic work of the Research Scholar or as an additional Supervisor(s).
- l. **"University"** shall mean the NIELIT.

## 3. Compositions and Functions of Various Committees

There shall be the following Research Council, Board of Research Studies, Seat Allocation Committee and Research Advisory Committee to conduct and supervise the Ph.D. programmes, namely:-

### 3.1. Research Council

There shall be a Research Council to lay down the broad policy guidelines pertaining to Ph.D. programme in all the Faculties of Studies of the University, consisting following persons namely:-

- i. Vice-Chancellor -Chairman (Ex-officio)
- ii. Any two Deans of the University (on a rotation basis) - Members
- iii. Two external experts from a Reputed Academic Institutions - Members
- iv. Two external experts from Industry - Members
- v. An external expert from National Level Research Labs/ Institution of Eminence - Member
- vi. An external expert from the Indian Patent office - Member
- vii. Dean Academics – Convenor (Ex-officio)

However, the Concerned Head(s) of the Department(s) shall be invited member(s), if any specific case is to be discussed.

The external experts will be nominated by the Vice-Chancellor from a panel put up by Dean Academics of the University.

The Research Council shall ensure uniform implementation of the Regulations and provide advice on procedural and related matters pertaining to Ph.D. programme(s) for all the Faculties of Studies.

A minimum of 50% of the total members shall constitute the quorum necessary for holding the meeting.

The Research Council meetings shall normally be held at least twice a year or more, depending on the urgency of individual cases.

The tenure of the Research Council will be for a period of 3 years.

### 3.2. Board of Research Studies (BRS)

Each Faculty of Study having one or more Departments/Academic Centre(s) offering the Ph.D. programme shall have a Board of Research Studies. All members of the Board of Research Studies must possess qualifications to act as supervisors of Research Scholar. The composition of the Board of Research Studies shall be as follows:-

- i. Dean of the respective Faculty - Chairman (Ex-Officio)
- ii. All Heads of the Departments - Members (Ex-officio)
- iii. Two external experts from a panel approved by the Vice-Chancellor to be nominated by the Chairman of the Board of Research Studies.
- iv. One Professor from each Department, on a rotation basis, nominated by the Vice-Chancellor, or if there is no Professor in a Department, then the Vice-Chancellor shall nominate either an Associate/Assistant Professor of the respective Department or a Professor from some other Department.
- v. Provided that the concerned Supervisor(s) of the Research Scholar(s) may be invited as and when required.

A minimum of 50% of the total members, including at least one external expert, shall constitute the quorum necessary for holding the meeting.

The tenure of the nominated members shall be two years.

Normally, the Board of Research Studies meeting shall be held at least once every three months or earlier, depending on the urgency of individual cases.

Board of Research Studies shall have the following responsibilities:

- i. The Board of Research Studies shall supervise all matters related to the Ph.D. degree.
- ii. The Board of Research Studies shall monitor the Scholars' progress in all the Departments under the Faculty of Studies and ensure proper implementation of these Regulations.
- iii. The Board of Research Studies shall consider and examine the recommendations of the Supervisors/ Research Advisory Committee pertaining to Provisional Registration, Evaluation of Research Proposal, Confirmation of Registration, Extension of Ph.D. duration, etc. for ratification/ recommendation, as applicable.
- iv. The office of the Chairman of the Board of Research Studies shall maintain all the records of registration and the progress of the research work of the Research Scholars.

### **3.3. Research Advisory Committee (RAC)**

There shall be a Research Advisory Committee for each Department. The composition of the Research Advisory Committee shall be as follows:

- i. Head of the Department as Chairman (Ex-Officio)
- ii. Two external experts in the relevant area from the panel approved by the Vice-Chancellor to be nominated by the Chairman of the Research Advisory Committee.

- iii. Two faculty members from the Department, nominated by the Dean of the respective faculty.
- iv. One faculty from another Department, nominated by the Dean of the respective faculty.
- v. Concerned Supervisor(s) of the Research Scholar.
  - (a) One faculty member as Convener, nominated by the Head of the Department

A minimum of 50% of the total members, including at least one external expert, shall constitute the quorum necessary for holding the meeting.

The tenure of nominated members shall be of two years.

Normally, the Research Advisory Committee meeting shall be held at least once every three months or earlier, depending on the urgency of individual cases.

Research Advisory Committee shall have the following responsibilities:

- i. To review the research proposal and finalize the topic of research;
- ii. To advise the Research Scholar to develop the study, design, and methodology of research and identify the course(s) that he/she has to complete;
- iii. To periodically review the progress of the research work of the Research Scholar and advise accordingly.

The Research Scholar shall appear before the Research Advisory Committee once every six months to make a presentation of the progress of his/her work for evaluation and further guidance. The six- monthly progress reports with the Research Advisory Committee's comments and the Minutes of the Meeting shall be submitted to the office of the Dean, Faculty of Studies. The observations / recommendations of the Research Advisory Committee shall also be communicated to the Research Scholar.

In case the progress of the Research Scholar is unsatisfactory, the Research Advisory Committee shall record the reasons for the same and suggest corrective measures. If the research scholar fails to comply with these remedial measures, in that case, the Research Advisory Committee may recommend to the Board of Research Studies specific reasons for the cancellation, as per rule, of the registration of the Research Scholar.

### **3.4. Seat Allocation Committee**

There shall be a Seat Allocation Committee at the University level. The composition of the Seat Allocation Committee shall be as follows:

- i. Senior Most Dean - Chairman

- ii. Any two Deans of the University (Ex-Officio) – To be nominated by the Vice Chancellor.
- iii. One Professor, One Associate Professor, One Assistant Professor – To be nominated by the Vice Chancellor.
- iv. Two representatives of the SC/ST/OBC/Differently-abled/ Women / Minority Category to be nominated Vice Chancellor.
- v. Controller of the Examination: Convener (Ex-Officio)

A minimum of 50% of the total members shall constitute the quorum necessary for holding the meeting.

The tenure of nominated members shall be of two years.

Seat Allocation Committee shall be responsible for the implementation of reservations, at the university level, for SC/ST/EWS/OBC /Differently-abled applicants, in accordance with the policies of NIELIT.

## **4. Minimum Qualification Criteria for Admission**

### **4.1. Regular/ Part Time Programmes**

#### **4.1.1. Faculty of Engineering**

Master's degree programme, after 4-year engineering graduation programme, with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in one of the following areas mentioned in Annexure 1.

**Or**

5-year Integrated Master's degree programme with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in one of the following areas mentioned in Annexure 1.

#### **4.1.2. Faculty of Science**

Master's degree programme, after 3 or 4-year graduation programme, with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in one of the following areas mentioned in Annexure 1.

Or

4-year Integrated Master's degree programme with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in one of the following areas mentioned in Annexure 1.

Or

NIELIT (DOEACC) C Level Certificate

### **4.2. Executive Ph. D. Programme**

#### **4.2.1. Faculty of Engineering**

Master's degree programme, after 4-year engineering graduation programme, with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in related area. The candidate must have minimum of 2 years professional experience after obtaining master degree.

Or

5-year Integrated Master's degree programme with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in one of the following areas mentioned in related area. The candidate must have minimum of 2 years professional experience after obtaining master degree.

#### **4.2.2. Faculty of Science**

Master's degree programme, after 3 or 4-year graduation programme, with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in one of the following areas mentioned in Annexure 1. The candidate must have minimum of 2 years professional experience after obtaining master degree.

Or

4-year Integrated Master's degree programme with at least 55% marks in aggregate or 6.0 CGPA on the scale of 10.0 in one of the following areas mentioned in Annexure 1. The candidate must have minimum of 2 years professional experience after obtaining master degree.

Or

NIELIT (DOEACC) C Level Certificate

Note:

- A. Candidates with minimum 75% marks in 4-year undergraduate degree programmes in one of the areas mentioned above can pursue Ph.D. /Executive Ph.D. programmes directly without master's degree in related faculty/department
- B. Final year students can also apply, however, admission shall be provisional.
- C. The working professionals, without academic background in CS/ CSE/ IT/ Electronics/ Communication, are eligible to pursue Executive Ph.D. subject to fulfilment of other eligibility criteria mentioned in this document.

Note : The scholars/candidates willing to pursue Executive Ph.D. must have master/bachelor degree in any branch of engineering/science.

## 5. Reservation

Seats are reserved as per Govt. of India Rules, AICTE and/or University Approval are as under:-

- a) 15% is reserved for the SC candidates
- b) 7.5% for ST candidates,
- c) 27% for Other Backward Classes,
- d) 3% for PWD candidates
- e) 10% for Economic Weaker Section (EWS).

## 6. Ph.D. and Executive Ph.D. Programmes

NIELIT Deemed to be University Ropar offers following Ph.D. Programmes under two categories in various faculties of at main campus Ropar and its constituent campuses.

1. **Ph.D.** designed to give teaching and research competencies and prepares the research scholars for building career in academia, industry and research. The scholars under this category are expected to work on regular or part time basis in the University/constituent campus.
2. **Executive Ph. D.** is designed for working professional at senior level and have sufficient working knowledge. The scholar can pursue Ph.D. while working in office. The scholar is expected to carry out research in his/her parent organization under guidance of supervisor. The scholar need to attend constituent campus/university regularly. However, such scholars are to meet the his/her supervisor for at least one week per semester.

## 7. Criteria for Admission

For admission to both categories of Ph.D. programmes, the candidates have to qualify Entrance Test conducted by the NIELIT Deemed to be University. Procedure for admission to Ph.D. Programme will be followed as per the Guidelines approved by the NIELIT Deemed to be University. The criteria for admission to Ph.D. is as under:-



- i. Those students who have secured 40% marks in the entrance test are eligible to be called for the interview.
- ii. A relaxation of 5% marks will be allowed in the entrance examination for the candidates belonging to SC/ST/differently-abled category, Economically Weaker Section (EWS), and other categories of candidates as per the decision of the UGC from time to time.
- iii. NIELIT Deemed to be University may decide the number of eligible students to be called for an interview based on the number of Ph.D. seats available in the respective departments/ approved research centres.

The selection of the candidate shall on purely based on interview after Entrance Test.

#### **7.1.1. Exemption from Appearing in Entrance Test**

NIELIT Deemed to be University shall admit Ph.D. scholars through Entrance Test. However, exemption from Entrance Test will be given to those who have already cleared any of the National Test for the eligibility of lectureship like UGC/ CSIR NET including JRF, GATE, CEED, GPAT, ICMR, ICAR, or any other prestigious test for National level scholarship / fellowship conducted by Govt. of India.

Such candidates are required to appear in interview for final selection without Entrance Test.

#### **7.1.2. Scheme to Entrance Test**

One objective type OMR based written test comprising 100 MCQs of 2 hours' duration will be conducted. The pattern will be as under.

Part	Particular	Number of MCQs
A	Logical reasoning and Aptitude	30
B	English Language	20
C	Subject (Domain Knowledge)	50

### **8. Migration Policy**

A candidate, who is pursuing Ph.D. in the subjects mentioned in this documents and wishes to continue the Ph.D. with NIELIT University, shall be allowed to pursuing Ph.D. from NIELIT University main campus or any of its constituents. In this case, the candidate has to produce NOC from University and Supervisor/co-supervisor before seeking admission. The fresh supervisor and/or co-supervisor shall be assigned by NIELIT University. The admission shall be subject to the availability of seats and fulfilment of terms and conditions mentioned in this document.

### **9. Coursework**

- i. Minimum number of the credit requirement for the Ph.D. programme should be at least 2 credits and a maximum of 16 credits.
- ii. A course work on Intellectual Property Rights (IPR) to be mandatory for all the students.
- iii. The coursework shall be treated as a prerequisite for Ph.D. preparation. A

minimum of four credits shall be assigned to one or more courses on Research Methodology which could cover areas such as quantitative methods, qualitative methods, computer applications, research ethics, and review of published research in the relevant field, fieldwork, etc.

- iv. Students who register for Ph.D. directly from four-year undergraduate with research will have to undertake 6-8 credit courses (at Ph.D. level) about relevant skills/research techniques/domain-specific subjects offered by the University.
- v. All Ph.D., entrants irrespective of discipline, shall be required to take credit-based courses in teaching/education/pedagogy/writing related to their chosen Ph.D. subject during their doctoral training period.
- vi. All candidates admitted to the Ph.D. programmes shall be required to complete the course work prescribed by the Department during the initial one or two semesters. In case of pandemic like situation, provision of blended mode should be made available.
- vii. Candidates already holding M.Phil. degree and admitted to the Ph.D. programme, or those who have already completed the course work in M.Phil. and have been permitted to proceed to the Ph.D. in an integrated course, may be exempted by the Department from the Ph.D.
- viii. All other candidates admitted to the Ph.D. programme shall be required to complete the Ph.D. coursework prescribed by the Department. Provided that, the candidates sponsored/authorized by the Govt. of India institutions/organizations who work for their Ph.D. degree in a University under an MoU/exchange programme/Govt. of India scheme, etc. may be exempted from Ph.D. course work provided they produce a certificate of completing a course work of equivalent duration/credit from their respective institution/organization.
- ix. Grades in the course work, including research methodology courses shall be finalized after a combined assessment by the Research Advisory Committee and the Department and the final grades shall be communicated to the Institution/College.
- x. A Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 10-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the thesis
- xi. Course work can be conducted online/offline, depending upon guidelines of UGC/NIELIT Deemed to be University.
- xii. The duration to complete course work is one year. However, six months extension can be given to candidate subject to approval of Competent authority.

## **10. Provisional Registration**

- i. After the finalization of the merit list of candidates, the offer letter shall be issued to the selected candidates by the Dean, Academics, giving fifteen days for admission.
  - (i) Research Advisory Committee shall meet within a week from the last date of admission for the allotment of the Supervisor.
  - (ii) Further, if the same departments exist on more than one campus, the first Research Advisory Committee for allotment of supervisors shall be held jointly.
- ii. Allocation of supervisors shall be governed by the duly approved guidelines by the Research Council and Senate from time to time.
- iii. The date of the first Research Advisory Committee meeting held for the allotment of Supervisors shall be the date of provisional registration of the candidates.
- iv. The release of fellowships shall start from the date of provisional registration of the Scholar.

## **11. Renewal of Registration**

- i. Every Scholar shall renew his/her registration at the start of every semester till the submission of the thesis. The registration renewal shall be subject to completing a specified number of credits/courses and/or satisfactory progress in his/her research work as approved by the Research Advisory Committee.
- ii. A Research Scholar, who fails to renew his/her registration and fails to pay the requisite fee, shall cease to be a Research Scholar immediately.
- iii. In exceptional cases of de-registration, the Vice-Chancellor shall have the power to allow re-registration of the Research Scholars.

## **12. Assignment of Supervisor**

- i. Every admitted scholar shall be assigned a Research Supervisor(s) by the concerned Research Advisory Committee, considering the preference of the area mentioned in the application form by the Research Scholar, the preference of the prospective Supervisor, and the availability of seats with the Supervisor concerned.
- ii. A supervisor shall be any faculty member of the NIELIT as defined in this Regulation. A faculty member may be appointed as a Supervisor provided he/she shall have:
  - (a) A Ph.D. degree from a recognized university/institution.
  - (b) At least three publications in refereed journals.or

At least three publications in the University Grants Commission- approved refereed journals identified by the Board of Research Studies for the Supervisors from disciplines other than Science and Engineering.

- (c) The total existing number of students already registered with him/her shall not exceed the maximum limits prescribed in this document.
- iii. Faculty/Scientists from outside NIELIT will be allowed as Co- Supervisors (Optional). Co-Supervisor can be from Industry / Research Organisations / Start-ups / Reputed Institutions / Govt Organisations having 10 years of experience in the relevant field.
- iv. The maximum number of students to be supervised at one time by a faculty member shall be as follows:
- (1) Assistant Professor: Four Research Scholars.
  - (2) Associate Professor: Six Research Scholars.
  - (3) Professor: Eight Research Scholars.
- v. In joint supervision, an enrolled Research Scholar shall be counted as one each for all the Supervisors.
- vi. The Supervisor(s) shall be appointed during the first Research Advisory Committee meeting.
- vii. The Board of Research Studies, on the recommendations of the Supervisor (s) and the concerned Research Advisory Committee, may allow joint Supervision but not exceeding a total of three Supervisors to supervise a Research Scholar with the condition that there shall not be more than two supervisors from within the University. The Supervisor(s) shall also be required to fulfill the mandatory requirements as mentioned in this document.
- viii. Appointment of any additional Supervisor(s) would not be made after a lapse of eighteen calendar months from the date of provisional registration of the Scholar except when none of the Supervisors is in the University for a year or more at a stretch.
- ix. A faculty member appointed as Ph.D supervisor is normally expected to be available to a Research Scholar in the University till the oral defence of his/her Ph.D. thesis work. However, under unavoidable circumstances, such as long leave of more than twelve months, resignation; retirement; or death; a supervisor may not be available to the Scholar. In such special cases, the appointment of Supervisor (s) shall be regulated as under:
- (a) If a supervisor proceeds on leave or lien of more than twelve months:-
    - (i) Where an additional supervisor exists, the Supervisor proceeding on long leave for more than twelve months can continue the co supervision.
    - (ii) Where co supervision does not exist, an additional Supervisor may be

appointed by the Board of Research Studies in cases where a student has not yet submitted his thesis.

(b) (i) Provided, if the thesis is submitted before the supervisor proceeds on leave, he shall continue to be the Supervisor.

(ii) Provided further, if a supervisor proceeds on leave for a period less than twelve months initially, but later extends his leave beyond twelve months, the above procedure shall be followed.

(c) In any exceptional situation like resignation, retirement, or death; an additional supervisor shall be appointed even after eighteen months from the date of provisional registration if required, on the recommendation of the Board of Research Studies and approval of the senate.

x. Ph.D. vacancy shall be considered to exist after a candidate successfully delivers his/her Pre-Ph.D. thesis submission seminar.

### **13.Evaluation of Research Proposal**

- i. After clearing the required Ph.D. course work with at least 6.0 Cumulative Grade Point Average, each Research Scholar shall present himself/herself for the Evaluation of his/her Research Proposal before the Research Advisory Committee.
- ii. Research Advisory Committee shall test the Research Scholar comprehensively based on viva-voce examination and Powerpoint presentation in the broad field of research along with the suitability of the research proposal, his academic preparation, and the potential to carry out the proposed research. The proposal shall be assessed for 100 marks and the passing marks for the comprehensive viva examination shall be 60%.
- iii. The Research Advisory Committee, based on the performance of the Research Scholar, shall make one of the following recommendations:
  - (i) Passed in comprehensive viva-voce examination and approved the Research plan.
  - (ii) Advised to re-appear and re-submit the research plan in view of the committee's suggestions and to be re-evaluated after a defined period but within the 18 months of the provisional registration.
- iv. All Research Scholars must present themselves to evaluate their research proposals after completion of course work but not beyond eighteen months from the date of provisional registration, failing which their Ph.D. registration may be canceled.
- v. A Research Scholar shall be provided a maximum of two attempts, within eighteen months, to pass the Evaluation of Research Proposal, failing which his/her provisional registration may be cancelled.

- vi. Under exceptional circumstances the Research Council may allow a Research Scholar for a third attempt to pass the Evaluation of Research Proposal.

#### **14. Confirmation of Ph.D. Registration**

- i. On the successful evaluation of the research proposal, the recommendation of the Research Advisory Committee shall be submitted to the Board of Research Studies for confirmation of Ph.D. registration of the Research Scholar.
- ii. The date of confirmation of Ph.D. registration shall be the date on which the Board of Research Studies confirms the registration.
- iii. It shall be mandatory for every Research Scholar to get his/her registration renewed each semester after obtaining a recommendation from the Research Advisory Committee based on his/her performance.

#### **15. Performance Monitoring**

- i. Each Research Scholar shall submit a progress report to his/her Supervisor (s) at the end of each semester. Upon receipt of the progress report, the Research Advisory Committee concerned shall review the same and advise the Research Scholar accordingly. The Research Advisory Committee shall assess the Scholar's progress as Satisfactory or Un-Satisfactory.
- ii. The academic calendar shall include the following dates for the submission of progress reports:
  - (i) Odd semester: 15th January,
  - (ii) Even semester: 15th July.

If any date (i)–(ii) is a holiday, then the next working day shall be considered.

In exceptional cases, the Dean, Faculty of Studies may condone the delay in submitting the progress report.

- iii. A satisfactory report would be mandatory to continue the research programme/fellowship.
- iv. If the progress is 'unsatisfactory', the report must indicate 'Unsatisfactory Progress' and include an appropriate further course of action to be taken by the Scholar. For the first appearance of the 'Unsatisfactory Progress' report, a warning will be issued to the Research Scholar by the Chairman, Research Advisory Committee. Subsequently, the fellowship of the Research Scholar will be stopped. The fellowship shall be resumed only after the scholar has secured 'Satisfactory' progress in the next assessment.
- v. If there are two consecutive 'Unsatisfactory Progress' reports, the registration may stand terminated.

- vi. Submission of progress reports in each semester shall continue till the submission of the Ph.D. thesis.

## **16. Minimum and Maximum Registration Duration Requirements**

- i. The duration of Ph.D programme shall be for a minimum period of three years and a maximum period of six years from the date of provisional registration.
- ii. In exceptional cases, the Vice-Chancellor on the recommendation of the Supervisor, Research Advisory Committee and the Board of Research Studies may grant a relaxation up to a maximum of six months in the minimum duration for the submission of the thesis.
- iii. In exceptional cases, the Vice-Chancellor on the recommendation of the Supervisor, Research Advisory Committee and the Board of Research
- iv. Studies may grant a relaxation up to a maximum of one year in the maximum duration for the submission of the thesis based on the six- monthly progress report.
- v. The women candidates and persons with Disability (more than 40% disability) shall be allowed a relaxation on a six-monthly basis up to a maximum period of two years in the maximum duration by the Vice- Chancellor on the recommendation of the Supervisor, Research Advisory Committee and the Board of Research Studies.

## **17. Pre-Ph.D. Submission Seminar**

- i. On completing the research work, every Research Scholar shall give a Pre-Ph.D. submission seminar before the Research Advisory Committee which shall also be open to all faculty members and other students.
- ii. Candidate must submit all his/her research publications to the Head of the Department through his/her Supervisor for scrutiny as per Clause 19.3. If found in order, the case may further be submitted to the Dean of the concerned faculty for approval. Finally, the same will be presented to RAC for approval of the pre-submission seminar.
- iii. The feedback and comments (including the final thesis title) obtained from them may be suitably incorporated in the draft dissertation/thesis in consultation with the Research Advisory Committee.
- iv. After the Pre-Ph.D thesis submission seminar, the exact title of the thesis shall also be confirmed by the Research Advisory Committee.

## **18. Ph.D. Thesis Submission**



- i. The Research Scholar shall submit, to the Supervisor, his/her thesis and the Synopsis within three months from the date of pre-Ph.D. submission seminar. However, if a Research Scholar fails to submit his/her thesis within the stipulated time and has suitable justification for the same, the Dean, Faculty of Studies may grant him/her extension of time by not more than three months on the recommendation of the concerned Research Advisory Committee, based on individual merits of each case. The Research Scholar may be allowed to submit his/her thesis within a period not exceeding six months; otherwise, he/she shall have to re-appear in pre-Ph.D. submission seminar.
- ii. The thesis shall be written in English in the specified format. It shall contain a critical account of the research characterized by the discovery of facts, a fresh interpretation of the facts and theories, or a significant original contribution to the advancement of knowledge. It should also bear evidence of the Research Scholar's analytical ability to conduct independent investigations, design or development. The content of the thesis should not have been submitted for the award of any other degree from any other university. A certificate to this effect should be provided by the Research Scholar and his Supervisor(s).
- iii. A Research Scholar may submit his thesis within the period as stipulated in the this document provided that:
  - (i) He/she has completed the required course work and declared 'pass' in the Evaluation of the Research proposal.
  - (ii) Research Scholar from the discipline of Science and Engineering has published at least two research papers, as first/corresponding author, in the refereed journals in the UGC CARE /Scopus/Science Citation indexed (SCI)/ Science Citation Index-expanded (SCIE) journals (or produced the evidence in the form of an acceptance letter). In addition, two research papers in reputed international Conferences as first/corresponding author is mandatory.

or

Research Scholar from disciplines of Management and Humanities has published at least two research papers, as first/corresponding author, in the journals identified by the Board of Research Studies from refereed journals in UGC CARE / Scopus / SSCI. In addition, two research papers in reputed international Conferences as first/corresponding author is mandatory.
  - (iii) Conference publications directly converted to journal publications shall not be considered for the fulfillment of the requirement of journal papers for Ph.D. thesis submission.
  - (iv) He/she should also have the evidence of the presentation of two research papers in the international conferences.
  - (v) Review papers/publications shall not be counted as a contribution toward two research papers. However, these may be considered at par with the international conferences paper.



- iv. The Research Scholar shall submit five copies of the thesis and Synopsis with a soft cover and the soft copy as a single pdf file for evaluation.
- v. In case of issues related to Intellectual Property Rights, necessary patents shall be filed before disclosure in the Pre-Ph.D. Submission Seminar.
- vi. The University shall evolve a mechanism using well-developed software tools and gadgets to detect plagiarism and other forms of unethical academic practices. Each thesis shall go through a Plagiarism Check that shall be verified by the authorized officer/supervisor of the University before submission. The certificate of verification by the concerned Supervisor(s)/ authorize officer has to be submitted along with the thesis at the time of thesis submission to the Head of the Department for further communication to concerned Dean.
- vii. The Research Scholar may incorporate in the thesis the contents of any work published by him/her on the subject during his/her Ph.D. and shall indicate the same in the thesis. Suppose any content of the published work authored by multiple authors has been incorporated into the thesis of one of the authors. In that case, the same content cannot be included by any other co-authors for the award of any degree. In this regard, a concurrence from all the co-authors shall also be taken before submitting the thesis.
- viii. The Research Scholar shall also attach a Student Approval Form in the prescribed format for hosting and distributing their thesis in digital format in 'Shodhganga', or any other server designated for this purpose by the University Grants Commission. The Controller of Examination shall undertake the hosting of the thesis.

## **19.Appointment of Examiners**

- i. Upon submission of the Synopsis and the Ph.D. thesis by the Research Scholar, the Supervisor shall forward the following to the Dean, Faculty of Studies, through the Head of Department:
  - (i) Five copies of the Ph.D. Thesis
  - (ii) Five copies of the Synopsis of the thesis
  - (iii) Certificate of Plagiarism check
  - (iv) The proposed Panel of Examiners duly signed by the Supervisor (s) in a sealed cover, addressed to the Controller of Examination, which shall include at least five examiners from within the country and three examiners from abroad.
- ii. All the proposed examiners should be of the rank of minimum of Associate Professor or equivalent in the areas relevant to the Ph.D. thesis and fulfill the minimum eligibility conditions to become supervisors as prescribed in this document.

- iii. A person working in the same laboratory (ies)/Institution(s) where the Research Scholar is employed cannot be appointed as External Examiner to evaluate that Research Scholar's thesis. Further, no person can be appointed as External Examiner from Laboratory/Institution to which one of Supervisor (s) of the Research Scholar belongs to. Further, co-author of research scholar shall also not be the eligible examiners.
- iv. On receipt of the Synopsis, thesis and all other documents as listed the Dean, Faculty of Studies shall forward the same to the Controller of Examination along with one additional panel of examiners duly signed by him/her in a sealed envelope and addressed to the Controller of Examination.
- v. In the panel of prospective examiners, the detail of each of them along with his full name, exact designation, area of research/expertise, NIRF and QS ranking of University/Organization, Google scholar-based citations, h-index and h10-index, name of Department/Laboratory, name of University/Organization, complete postal address, email ID, Landline and/or mobile number of examiner shall be provided in the prescribed proforma.

## **20.Ph.D. Thesis Evaluation**

- i. It would be the prerogative of the Vice-Chancellor to appoint three examiners (Two National and One International), choosing from the Panels of Examiners given by the Controller of Examination.
- ii. The Controller of Examinations shall ensure all communication with the examiners, viz. requesting their consent to be Ph.D. Examiners, sending of both hard / soft copies of the Ph.D. thesis for evaluation and receiving the report(s) of the examiners by postal mail / e-mail.
- iii. The examiners may recommend for -
  - (i) conducting Ph.D. Viva-voce for the award of a Ph.D. degree; or
  - (ii) conducting Ph.D. Viva-voce for the award of a Ph.D. degree subject to corrections/revisions being made in consultation with the Supervisor before viva voce; or
  - (iii) re-submission of the thesis within twelve months; or
  - (iv) rejection of the thesis.
- iv. The open viva-voce of the Research Scholar, to defend the thesis, shall be conducted only if the evaluation report(s) of all the examiners on the thesis is satisfactory and include a specific recommendation for conducting the viva-voce examination. If the evaluation report of only one of the examiners is unsatisfactory and does not recommend viva- voce then the University shall send the thesis to the fourth examiner out of the approved panel of examiners. The viva-voce examination shall be held only if the report of the fourth examiner is satisfactory. If the report of the fourth examiner is also unsatisfactory, the thesis shall be rejected and the Research Scholar shall be

declared ineligible for the award of the degree.

- v. The Controller of Examinations shall forward the reports of all the examiners to the Dean of the respective Faculty. The Dean of the concerned Faculty of Studies shall recommend an appropriate course of action as per Clause-21.4, for the approval of the Vice-chancellor. The Dean of the concerned faculty shall also communicate a copy of all examiners' reports to the concerned Supervisor. Anonymous reports of the examiners, if recommended for revision(s), anonymous reports of the examiners shall be shared with the Research Scholar. The revised thesis may be submitted within twelve months from the date of communication by the Dean.
- vi. After receiving the satisfactory evaluation reports, a Research Scholar shall be required to appear in the viva-voce examination before the examiner nominated by the Vice-Chancellor. The Dean of the concerned Faculty of Studies shall organize the viva- voce examination.
- vii. The open viva-voce Examination may also be conducted through video conferencing, if necessary.
- viii. The viva-voce examination shall be open to the members of the Research Advisory Committee, all faculty members of the Department, other Research Scholars, and other interested experts/researchers.
- ix. If the thesis has undergone revision after external evaluation, the soft copies of the final version of the Ph.D. thesis, after revision, must be re- submitted to the office of the Dean, Faculty of Studies. To ensure that the soft copy is complete and is a replica of the print version (accepted for the award of Ph.D.), the Supervisor and Head of the Department shall authenticate the soft copy submitted by the Scholar.
- x. The University shall develop appropriate methods to complete the entire process of evaluation of the Ph.D. thesis within six months from the date of submission of the thesis.
- xi. The examiner appointed shall conduct the open viva-voce in the presence of faculty members and the students and shall recommend to the Dean, Faculty of Studies, one of the following courses of action:
  - (a) That the Ph.D. degree be awarded;
  - (b) That the Research Scholar be re-examined at a later specified time in a specified manner;
  - (c) That the Ph.D. degree shall not be awarded;

In case of (a) and (b), the examiners shall also provide to the Research Scholar a list of all corrections and modifications in the thesis (if required) including suggestions made by the examiners during the thesis evaluation. In the case of (c), the reason must be recorded in detail.
- xii. The following panel shall be the authorized signatory for the viva-voce report.

- (a) External Examiner;
  - (b) Chairman, Research Advisory Committee;
  - (c) Dean, Concerned Faculty;
  - (d) Supervisor(s)
- xiii. The report in the prescribed format and duly signed by the examiner(s) shall be put in a sealed envelope along with an attendance sheet and copy of open defence notifications. All of these shall be submitted to the Controller of Examinations by the Dean of the respective Faculty.

## **21. Award of The Ph.D. Degree**

- i. The University shall award Ph.D degree provided that:
  - (a) The examiner appointed for viva-voce recommends;
  - (b) The Research Scholar produces a 'No Dues Certificate';
  - (c) The Research Scholar has submitted two hardcover copies of the thesis; one for the Library, after incorporating all necessary corrections/modifications; and
  - (d) The Research Scholar has submitted one copy of the thesis in soft form after incorporating all necessary corrections/modifications.
- ii. Prior to the actual award of the degree, the University may issue a Provisional Certificate to the effect that the degree has been awarded in accordance with the provisions of the University Grants Commission Regulations.

## **22. Fee**

- i. Tuition fee shall be decided by the NIELIT University and notified in the University prospectus on yearly basis. Unless prescribed otherwise, full fee shall be charged from the Research Scholar/URF on semester/annual basis, till the submission of the Ph.D. thesis.

## **23. Cancellation of Ph.D. Registration**

- i. Registration of a Ph.D. Scholar shall be cancelled in any one of the following conditions after due approval of the Vice-Chancellor:
  - (i) If he/she withdraws from the Ph.D Programme and the Board of Research Studies duly recommends the same.
  - (ii) If he/she fails to renew his/her registration in any semester subject

to the provisions in this Regulation.

- (iii) If the provisional registration is not confirmed.
- (iv) If his/her academic progress is found unsatisfactory.
- (v) If he/she is found involved in the act of misconduct and/or indiscipline and termination is recommended by a competent authority.
- (vi) If he/she fails to deposit the fees.

## **24. General Rules**

- ii. Qualifying the Entrance Test shall not entitle a candidate to get enrolment in the University. It depends on merit and availability of seats.
- iii. Department concerned where he / she intends to seek enrolment. This will be followed by mandatory interview. The selection would be solely based on the performance of the candidates in the interview. It will be the responsibility of the candidate to ensure his/her eligibility and fulfilment of such other conditions as may be prescribed for enrolment in the Rules and Regulations of the University. The enrolment will be subject to the availability of seats and Experts for Guidance / Supervision in the Area of Research to be chosen by the candidate and the candidate is required to verify these facts from the concerned Department before applying for the Test.
- iv. The Entrance Test will be held as per scheduled at Ropar only.
- v. Once the candidate has submitted the information on the website, any change in the Form/information, including category once marked, shall not be allowed.
- vi. The fee for the Entrance Test once paid shall not be refunded / transferred / adjusted.
- vii. The candidates shall be required to hand over their Answer-Sheets and the Question Papers / Booklets in full to the Centre Superintendent even if they have not attempted any question. No page/part of the Question Paper/Answer Sheet is to be removed / torn/taken out of the Examination Centre under any circumstances, failing which the candidates shall be disqualified from the entire test.
- viii. There shall be no negative marking.
- ix. There shall be no re-evaluation of thesis once result is declared.

## **25. Interpretation**

- i. Any doubt or any other dispute arising about the interpretation of these Regulations or otherwise shall be referred to the Chairman, Research Council,

whose decisions shall be final.



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**NIELIT**

**Annexure 1: Areas for Eligibility for Ph.D.**

Faculty of Science	Faculty of Engineering			
Department of Computer Science and Applications	Department of Computer Science and Engineering	Department of Artificial Intelligence	Department of Electronics Engineering	Department of Electronics and Communication Engineering
<ul style="list-style-type: none"> <li>i. <b>Computer Science</b></li> <li>ii. <b>Computer Applications</b></li> <li>iii. <b>Information Technology</b></li> <li>iv. <b>Any Specialized area of Computer Science /Computer applications/ Information Technology</b></li> </ul>	<ul style="list-style-type: none"> <li>i. Information Technology</li> <li>ii. Computer Science and Engineering</li> <li>iii. Computer Engineering</li> <li>iv. Computer Science and Engineering with specialized area of computer science</li> <li>v. Any Specialized area of Computer Science</li> <li>vi. Electronics and related subjects</li> </ul>	<ul style="list-style-type: none"> <li>i. Information Technology</li> <li>ii. Computer Science and Engineering</li> <li>iii. Computer Engineering</li> <li>iv. Computer Science and Engineering with specialized area of computer science</li> <li>v. Any Specialized area of Computer Science</li> <li>vi. Electronics and related subjects</li> </ul>	<ul style="list-style-type: none"> <li>i. Electronics Engineering with specialized area of Electronics</li> <li>ii. Any Specialized area of Electronics and its allied Engineering</li> </ul>	<ul style="list-style-type: none"> <li>i. Electronics &amp; Communication Engineering with specialized area of Electronics/communication</li> <li>ii. Any Specialized area of Electronics &amp; communication and its allied Engineering</li> </ul>

**The scholars/candidates willing to pursue Executive Ph.D. must have master/bachelor degree in any branch of engineering/science.**