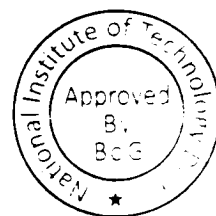


Regulations

Of

Ph.D. Programme



National Institute of Technology, Delhi

National Institute of Technology, Delhi (NITD) is setup by Govt. of India during the 11th Five Year Plan. It has been declared as an Institute of National Importance by an act of Parliament of India. It aims to provide Instructions and Research avenues in the areas of Engineering, Technology, Management, Education, Sciences and Arts and for advancement of Learning and dissemination of knowledge in such areas.

The institute offers Ph.D. Programme, as per the rules and regulations mentioned below, not only to keep pace with the expanding frontiers of knowledge but also to provide research training relevant to the present social and economic objectives of the Country and the World.

1. Minimum Educational Qualifications for Admission:

Ph.D. in Relevant Engineering:

Master's Degree in Engineering/Technology or equivalent in the relevant area of research along with Bachelor's Degree in appropriate branch of Engineering/Technology or equivalent with a first class or minimum 60% marks or equivalent Grade Point at Master's and/or Bachelor's level.

Ph.D. in Sciences/Humanities/Management:

Master's Degree in appropriate branch of Science/Humanities/Social Sciences/Management or equivalent with a first class or minimum 60% marks or equivalent Grade Point.

In order to improve and broaden the student's area of study and research, NITD supports cross-disciplinary exchange and research in the following Engineering/Science specializations.

Ph.D. in Cognitive Engineering/Science specialization:

Master's Degree in Engineering /Science/Technology or equivalent in the following cognitive areas of research along with Bachelor's Degree in branch of Engineering/Science/Technology or equivalent with a first class or minimum 60% marks or equivalent Grade Point at Master's and/or Bachelor's level.

Cognitive Group: Electronics & Communication Engineering/Computer Science & Engineering/Electrical Engineering/Electrical & Electronics/Instrumentation Engineering/Information Technology/ Computer Applications/ Biomedical Engineering/Physics

Note 1: Relaxation in minimum Percentage/Equivalent Grade Point requirements will be given as per the National Reservation Policy of Govt. of India.

Note 2: The norms & requirements applicable for respective student categories should also be fulfilled.

2. The Student Categories

The students admitted to the Ph.D. Programme shall be classified under any one of the following categories:

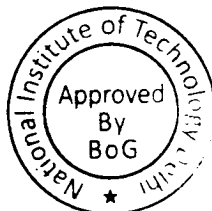
2.1. Fulltime Research Scholar

2.1.1. Research Scholar(RS)

Students under this category are entitled to financial support as per the latest MHRD norms.

2.1.2. Research Scholar through Project (RSP)

Students eligible under this category are entitled to financial support from sponsored projects based on the predetermined norms as mentioned in the project.



2.1.3. Research Scholar through Govt./Semi Govt. Fellowship Award (RSFA)

These candidates are financially supported under various Govt./Semi Govt. schemes (CSIR, UGC, DAE, DST, DBT, NBHM, etc.) and some other organizations.

2.1.4. Research Scholar through Sponsorship (RSS)

These candidates are sponsored by recognized R&D organizations for doing research work in the Institute. Candidates are expected to be released for full time research work by the parent organization. They will not receive any financial support from the Institute. Sponsorship letter should be brought at the time of written test and/or interview.

An institute having signed research collaboration MOU with NIT, Delhi may also sponsor a candidate, in such cases minimum residential requirements may be met at NITD or collaborative institute.

2.1.5. Research Scholar through Self Finance (Indian Nationals/Foreign Nationals/Study Leave (RSSF))

2.1.5.1. **Indian Nationals:** This category refers to persons with good academic record and experience to join in the doctoral programme. They are admitted through the usual admission procedure but they would not get any financial support from the Institute. If admitted, these students have to complete their programme within prescribed time without any financial support from the Institute.

2.1.5.2. **Foreign Nationals:** These students are admitted through Embassy of the respective Govt. after getting approval from the Ministry of External Affairs and no objection certificate from Ministry of Human Resources Development, Department of Education, Govt. of India.

2.1.5.3. **Study Leave:** This category refers to candidates who are released from Governmental or educational institutions on study leave for a period not less than two years for doing research work at the Institute. Employer's Letter for Study Leave should be produced at the time of joining, if selected.

2.1.6. Research Scholar through Foreign Nationals with Indian Council for Cultural Relation Award (RSICCR)

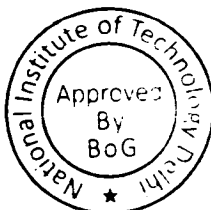
These students are sponsored by their Governments and awarded scholarship by them. They should apply for admission through Indian Embassy in their country.

2.2. Part Time Research Scholar

2.2.1. Institute Staff (IS)

This category is only for the persons employed as Institute Staff at NIT, Delhi on regular basis or on contract.

- i. The candidate on contract should have worked in the Institute for at least 1 year and shall continue to do so while the degree programme is to be pursued.



3.2. Entrance Test

All the eligible candidates shall be required to take an Entrance Test followed by an interview to be organized by respective department as the case may be. The Entrance Test will be of MCQ Mode. A candidate securing at least 40% marks in the Entrance test shall be declared qualified in the test. The syllabus for the same will be notified on the Institute Website.

3.3. Interview

The eligible candidates who have qualified the Entrance test shall be called for the interview. At the time of interview, candidates are expected to discuss their research interest/area of interest.

3.4. Interview Committee

The Interview Committee shall comprise of the following:

- i. Director / Nominee
- ii. Dean (Academic) / Nominee
- iii. All faculty members of the concerned department/cognitive department (with Ph.D. Qualification)
- iv. Person(s)* from the collaborative organizations/industries/institutes (Indian/Foreign) having MoU with NITD and has been approved to act as supervisor.

**Persons from collaborative organizations/industries/institutes (Indian/Foreign) having MoU with NITD may join for the interview through NKN or Skype or any other ICT mode.*

Keeping in view the available seats, the Interview Committee shall recommend the names of candidates found suitable for admission to Ph.D. Programme for the approval of Chairman, Senate. The Deputy/ Assistant Registrar (Academic) shall notify the list of selected candidates through appropriate means.

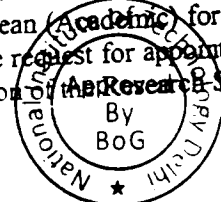
4. Research Guidance

4.1. Ph.D. Supervisor:

A permanent faculty member/Officer/Design Engineer of the NIT, Delhi or collaborative organizations/industries/institutes (Indian/Foreign) having MoU with NITD with Ph.D. qualification can act as a research supervisor. However, in case of demise/any other casualty, the Research Scholar registered under a supervisor shall be transferred to other suitable supervisor(s) in the department subject to the approval of RAC. However, it shall be the responsibility of the Head of the Department to bring the matter for the information of Chairman, RAC, to decide the future course of action for the candidate(s) registered with the Supervisor. In addition, if a supervisor gets transferred/reemployed/avails deputation/lien in other department/ workplace/centre with in NIT, Delhi or retirement/ resignation/ long leave of a supervisor from the institute (more than 06 months)/lien/ deputation to join other institute then he/she shall continue supervising the Research Scholar in the department where Research Scholar is initially registered. In case the Supervisor is likely to be superannuated within five (5) years from the date of registration of a Research Scholar, he/she shall be allowed to act as supervisor if there is one more regular faculty member from the same department to act as other supervisor.

4.2. Other Supervisor:

Depending upon the nature of the research problem, other supervisor(s) may be allowed in addition to the supervisor from the department where the Research Scholar is registered. In such case, maximum two other supervisors may be approved by RAC, out of which, one from the same/other department from NIT, Delhi, and second (in-service or retired) from an organization other than NIT, Delhi, preferably a centrally funded institution/ university/Research laboratory of Government of India/Public Sector undertakings/state funded University /institution. The consent (on the official letter head) of the proposed supervisor(s) shall be forwarded to Dean (Academic) for consideration in the RAC. The RAC may recommend the other supervisors. The request for appointment of other supervisor(s) may be entertained within 18 months of the registration of the Research Scholar.



- ii. Admission will be on the basis of written test and interview as applicable to the concerned programme.
- iii. If selected, the permanency or otherwise, of the candidate will not come in the way of admission process.
- iv. If a candidate registered under the category but is not continuing his/her service in the institute he/she may be considered under the RSSF and not under this category.

2.2.2. Project Staff (PS)

This category refers to candidates employed at NIT, Delhi and working on sponsored projects undertaken by the Institute and admitted to the Ph.D. programme, if the duration of the Project at the time of admission is around 3 years or more.

2.2.3 External candidates, sponsored by recognized R & D organizations (EX)

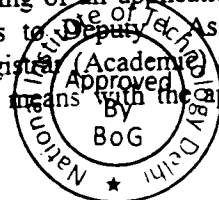
- i. The candidates employed in recognized R & D organizations and desirous of pursuing Ph.D. programme while in employment may apply for admission as external candidates. These candidates will be allowed to register for Ph.D. with a Supervisor (internal) as decided by NIT, Delhi and a Co-supervisor (external) from their parent organization where they will be doing the research work. A candidate from an educational institute with one year experience may also be considered under this category but the condition of a supervisor from his/her parent organization may not be optional.
- ii. The candidate should submit at the time of test/interview a Sponsorship Certificate from the organization in which he/she is employed giving an undertaking that the candidate would be released from the normal duties to complete the course work and details of facilities relevant to the research programme and available to the candidate
- iii. The candidate is required to be in residence at the Institute or collaborative partner of NITD to complete the course work of his/her Ph.D. Programme.
- iv. To promote interaction and association of the Institute Faculty and the external organization concerned, meeting between the internal and external supervisors should be arranged at least once in a year in the Institute or in the sponsoring organization to ensure a continuous dialogue and participation in the joint supervision and exchange programme.
- v. The option of external registration is for applicants who are working in well-equipped scientific institutions, laboratories, R&D establishments and industrial organizations engaged in research based activities and having collaboration with NITD and other educational institutes not considered otherwise.

3. Admission Process

Applications on prescribed format for admission to Ph.D. programme will be invited twice in a year through advertisement in the national dailies, media and on institute's website. The advertisement shall include the predetermined seats and as per the guidelines of reservation policy of Government of India. A candidate interested in applying in more than one department/category shall be required to apply on separate application form along with appropriate fee. The candidate shall be required to submit a write-up (1-2 pages) of his/her proposed area of research along with the application.

3.1. Screening Committee:

A Screening Committee will comprise of the Head of Department (HoD) and three faculty members holding Ph.D. degree and a member holding Ph.D. degree from the collaborative organizations/industries/institutes (Indian/Foreign) having MoU with NITD. The committee shall screen all applications for admission to Ph.D. programme. The committee is expected to verify the eligibility of the applicant(s) for the programme/Entrance Test based upon his/her details mentioned in the application(s) and the documents enclosed. After screening of all applications, the Head of Department shall forward the list of the eligible candidates to Deputy Registrar (Academic) with a copy to Dean (Academic). The Deputy Registrar (Academic) shall consolidate the list of all the departments and notify through appropriate means with the approval of Dean (Academic).



4.3. Change of Supervisor:

The request for change of supervisor(s) may be entertained within 18 months of the registration. Permission may be granted to a Research Scholar for the change of Research supervisor(s) by the RAC under exceptional circumstances. However, in such cases, the consent of both, i.e. approved Research supervisor and proposed (new) Research supervisor shall be essential.

4.4 Limit on number of Research Scholars

The limit on the number of Research Scholar with a 'supervisor' and/or 'other supervisor' shall not exceed eight (08) at a time. In case of joint supervision the available limit shall be subtracted by 0.5 for each supervisor. Further, a faculty member/officer can act as a supervisor for research scholars registered with any other Institute/University after getting approval from the competent authority, provided the institute work does not suffer due to the same.

5. Admission

Candidates, whose selection is recommended by the Interview Committee and approved by Chairman Senate, shall be offered admission and advised to deposit prescribed fee. After depositing the fee, he/she shall be designated as "Research Scholar (RS)". For all purposes, the date of registration of a Research Scholar shall be the date on which he/she has deposited fee in the institute. After registration, Research Advisory Committees (RACs) for the individual Research Scholar shall be constituted by Dean (Academic) in consultation with the concerned HOD and Supervisor(s) as per Clause 11. After the constitution of the RACs, the first meeting shall be held within a month to approve the supervisor(s), broad area of Research and the courses of study for individual Research Scholar

6. Registration

The Research Scholar is required to follow the instructions given below for registration:

- i. He/she is required to register himself/herself (in person) on the scheduled dates of registration (only). There shall not be any provision of deputing any representative by him/her for registration purposes. Further, he/she shall be required to register in subsequent semesters till the submission of Ph.D. thesis.
- ii. He/she shall deposit the requisite fee at the time of registration in every semester.
- iii. He/she is required to fill the registration form and deposit it with the department through his/her supervisor(s).
- iv. He/she shall be allowed to register for the subsequent semester(s) if his/her progress report by his/her supervisor(s)/HOD during the previous semester(s) is found satisfactory.
- v. The act of not-depositing the fee or not-completing the registration process as mentioned above on the scheduled dates shall be treated as the "voluntary discontinuation" of studies by the Research Scholar. In such case, he/she will cease to be a bonafide student with immediate effect.
- vi. The instructions as above for registration shall be applicable for all full-time and part-time Research Scholars.
- vii. Late registration will be with the prescribed late fee up to one week beyond the last date specified for the registration. However under special circumstances, the period may be relaxed by the Dean (Academic)/ Chairman Senate. The candidate is required to follow the registration rules till he/she submits his/her Ph.D. thesis.

7. Duration of Ph.D. Programme

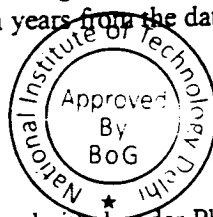
The minimum period of residential requirement for study and research at the institute from the date of registration to the date of submission of thesis shall be 36 months. A candidate is normally expected to submit his/her thesis within five years from the date of registration. This period may be extended by the Senate as a special case to a maximum of seven years from the date of registration after which the registration shall stand cancelled.

8. Course Work

- 8.1. Minimum Credit and CGPA requirements:

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Every External/Internal Research Scholar (Full Time/Part Time) admitted under Ph.D. Programme



is required to pass the theory courses approved by the RAC (for minimum 9-12 credits) Securing CGPA=6.0 (minimum) or equivalent. The grading system similar to post-graduate programmes shall also be applicable to Ph.D. Programme.

8.2. Courses:

The course work must include one course of Research Methodology and rest of the courses may be taken as per the recommendations of RAC. Courses completed after the date of registration shall count towards the requirement for the award of Ph.D. degree. The Research Scholar (RS) with the approval of RAC can complete the requisite course work either at NITD or any other place of collaborative organization/industry/institute (Indian/Foreign). The credits earned at the collaborative organizations/industries/institutes (Indian/Foreign) having MoU with NITD shall be transferable.

8.3. Attendance and Grade requirements:

The Attendance and Grade requirements shall remain same as of M.Tech. of NITD, however if the Research Scholar has completed his/her requisite course work at any other place of collaborative organization/industry/institute (Indian/Foreign) the attendance and grade earned and communicated to NITD by the collaborative organizations/industries/institutes (Indian/Foreign) shall be considered.

9. Leave Rules

- i. The Research Scholar is required apply to the concerned HOD for leave stating the reasons whenever they are not in a position to attend classes/perform thesis work.
- ii. All Research Scholars are eligible for leave of 30 days in a year @ 15 days per semester.
- iii. The intervening holidays will be treated as part of leave with provision of suffixing and prefixing holidays. In no way, the leave rules would affect the attendance requirements for the Research Scholar.
- iv. All Research Scholar shall be allowed to leave station for visiting other places (In addition to the collaborating organisations/Institutes/Industries) preferably after completion of their course work or during vacations when there is no teaching work scheduled, if recommended by Supervisor(s) and HOD, and approved by Dean Academic well in advance for various purposes like library consultation, meeting experts, presentation of research papers/participation in the conferences/short term courses/symposiums etc., getting samples tested from other laboratories, using the lab facilities elsewhere if the same is not available at NIT, Delhi, interaction with the External Supervisor, and any other similar purpose as recommended by his/her Supervisor(s) and HOD. For these purposes, he/she shall be permitted for 60 days per year. The leave as mentioned at Clause 9.(ii) shall be in addition.
- v. Maternity Leave:

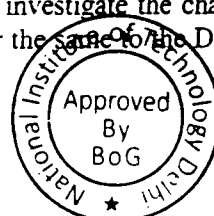
The woman Research Scholar will be eligible for Maternity Leave with Assistantship as per Govt. of India notification released from time to time.

10. Discipline

The NIT, Delhi is committed to fostering integrity in the conduct of research. All members of research community including staff, research staff, students, fellows, adjunct faculty, and visiting researchers, are expected to adhere to the highest ethical and professional standards as they pursue research activities.

10.1. The Research Scholar is required to observe proper discipline and decorous behaviour both inside and outside the campus. He/She should not indulge in any activity, which will tend to lower the prestige of the institute.

10.1.1. Any act of indiscipline on the part of Research Scholar and/or research misconduct by any person as mentioned above, which is reported to Dean (Academic), will be referred to the Discipline Committee of the Senate from time to time. The Committee will investigate the charges. If the charges are sustainable, it will recommend suitable punishment for the same to the Director. The decision of the Director will be final in this regard.



11. Research Advisory Committee (RAC)

The RAC shall be constituted within one month of the registration of the research scholar. The head of the department shall prepare the case and will submit the same in the office of Dean Academic.

11.1. Composition of Research Advisory Committee

The following will be the composition of RAC:

- i. Director (Ex-officio) (Chairman)
- ii. Head of the concerned Department (Member)
- iii. All approved Ph.D. supervisors of the Research Scholar (Member(s))
- iv. Subject expert(s) outside the institute to be nominated by the Chairman, Senate. The concerned supervisor(s) shall provide a list of three Subject Experts with their addresses, telephone numbers and e-mail IDs (through Head of Department) to Dean (Academic) well in advance.

11.2. Responsibilities of Research Advisory Committee

The RAC will have the following responsibilities:

- i. Confirmation of supervisor to the Research Scholar
- ii. To monitor the performance of the Research Scholar in each semester.
- iii. To approve (as recommended by supervisor(s)) the Courses of studies for the concerned Research Scholar
- iv. To hold the comprehensive viva-voce examination of Research Scholar

12. Minimum Residential Requirements

For a Research Scholar under scholarship/Project scheme, the minimum period of residential requirement for study and research at the institute from the date of registration to the date of submission of thesis shall be 24 months. During this residential requirement, the Research Scholar shall report to his/her supervisor(s) from the department where he/she is registered. The Research Scholar is allowed to leave station to visit other libraries/laboratories/industry etc. for consultation/experimentation/data collection/ attend a conference/present a paper in a conference/symposium after due permission from his/her supervisor(s) and approval of the concerned Head of Department.

A fulltime research scholar's residential requirement shall be from the registration till the final submission of the thesis.

However, there shall not be any residential requirement for the regular internal faculty registered as part-time Research Scholar, and also other part-time Research Scholar employed in an AICTE/UGC approved institution in Delhi/within a radius of 200 km around NIT, Delhi, or external candidates sponsored from a centrally-funded institution/ university/Research laboratory of Government of India/Public Sector undertakings/state funded University /institution having a research collaboration MOU with NIT, Delhi. These external/part time RSs shall be required to submit a Certificate from their Employers at the time of registration stating that the concerned candidate(s) is a permanent employee of that organization and is allowed to pursue his/her research work at NIT, Delhi, and his/her routine work permit him/her to devote sufficient time for research work. In case of transfer/deputation/change of employment, it will be the responsibility of the Research Scholar to obtain the similar document from his/her new/immediate employer and submit it to the institute. But for all other external/part time Research Scholar, this residential requirement shall be a minimum of 06 months. A full time research scholar may be allowed to continue as part time research scholar only after the successful completion of his/her comprehensive examination and then onwards he/she will be governed by Part-Time Ph.D. regulations.

13. Comprehensive Viva-Voce Examination

13.1. The comprehensive examination of the Research Scholar shall be held after ~~after~~ six months (minimum) of registration, provided he/she has passed the course work prescribed by the RAC. If Research Scholar does not submit his/her research plan/detailed research proposal for the purpose of his comprehensive examination within 18 months of his/her registration, then his/her registration shall stand cancelled and he/she shall have to apply for re-admission.

13.2. The comprehensive examination shall be held as oral.



13.3. For the comprehensive examination, the Research Scholar is required to present a Research Plan/Detailed Research Proposal before RAC which shall preferably be prepared on the following guidelines:

13.4. The Research Plan/Proposal

13.4.1. The proposal may have the following Sections:

- i. Introduction, which may include brief introduction to the research area, its importance and brief review of literature on the proposed area of research.
- ii. Research Significance
- iii. Objectives
- iv. Scope and Methodology
- v. Bar Chart indicating time schedule
- vi. List of most appropriate references

13.4.2. The title page should contain the proposed title of the research, name and roll number of the Research Scholar, name (s) of the supervisor (s), department, institute, month and year of submission.

13.4.3. The total number of pages of the proposal is limited to 15 inclusive of the title page.

13.4.4. It should be typed on a A4 size paper, Times New Roman 11 point font size, preferably at 1.5 line spacing with 30 mm margin on left and 25.4 mm margin on right, top and bottom.

13.4.5. The Major Headings shall be in bold block capitals having 12 point font size. The Sub headings (if any) shall be bold title case.

13.5. In case, the RAC is satisfied with the presentation, then he/she shall be declared successful/pass in the comprehensive examination and his/her Research Plan/detailed Research Proposal shall be approved. On the other hand, if the performance of the Research Scholar is not satisfactory, then he/she may be given one more chance to present his/her research proposal within three months of first presentation. After the second attempt, if the performance of the Research Scholar remains unsatisfactory, his/her registration shall be cancelled from the institute.

14. Pre-submission Seminar and submission of synopsis

14.1. Upon satisfactory completion of course work including research methodology and comprehensive examination, which shall form part & parcel of Ph.D. Programme, Research Scholar, before submission of synopsis, shall make a pre- Ph.D. presentation in the Department that may be open to all faculty members and research students, for getting feedback and comments, which may be suitably incorporated into the draft thesis under the advice of the supervisor. If the RAC is satisfied with the performance of Research Scholar, he/she is required to submit the synopsis (10 copies) of his/her research work.

14.2. The synopsis will be submitted preferably three months before the submission of Ph.D. thesis printed on A4 size paper incorporating appropriate references/bibliography.

14.3. The Synopsis to be submitted by the Research Scholar for Pre-Submission Examination shall be called as 'Ph.D. Synopsis'. It should preferably contain Sections on Introduction which includes brief Review of Literature, Objectives, brief Methodology, brief Analysis of Results, Case Studies if any, Conclusions and Recommendations. List of publications should also be given at the end. The Figure (s) and Table (s) may only to be given if considered utmost necessary. The formatting guidelines of the Ph.D. Research Proposal given above in 13.4 may be followed.

14.4. The title page should contain the title of the research, name and roll number of the Research Scholar, name (s) of the supervisor (s), department, institute, month and year of submission.

14.5. The total number of pages of the synopsis is limited to 10 inclusive of the title page.

14.6. Closed Evaluation:

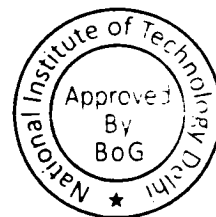
A Research Scholar with the recommendation of his/her Supervisor(s) may request for closed evaluation of his/her work, if it may/has lead to patent(s). The closed evaluation shall be done by the panel as recommended by RAC with the approval of Chairman, Senate. The



closed evaluation may be continued to complete all formalities as mentioned below till the Research Scholar is recommended for the award of the degree to the Senate through the chairman, Senate after the final viva-voce.

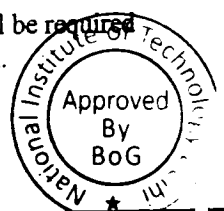
15. Submission of thesis

- 15.1. On the recommendations of RAC, Dean (Academic) may allow a Research Scholar to submit his/her thesis provided he/she has published/accepted for publication minimum two research paper in a national/international refereed Science Citation Information (SCI) indexed journals (out of his/her research work) and submitted the synopsis of his/her thesis subject to fulfilling all other regulations.
- 15.2. The thesis should be written in English in a format, which may include preferably the following sections:
 - i. Abstract
 - ii. Introduction and objectives
 - iii. Literature review
 - iv. Significant Contributions
 - v. Experimental/Theoretical work
 - vi. Results and discussions
 - vii. Impact to the Society
 - viii. Conclusions
 - ix. Scope of the future work
 - x. References/Bibliography
 - xi. Reprint(s) of the publications
- 15.3. In thesis write up, the following guidelines should be followed:
 - 15.3.1. The thesis should be typed 1.5 spaced on both sides of the paper of A4 size, leaving 40 mm margin on the left hand side. After open house viva-voce to defend thesis finally copies of the thesis, with all photographs and illustrations, as mentioned in clause 15.3.1 are to be submitted.
 - 15.3.2. Headings of sub-divisions of the text should be in lower case capitals, left aligned and bold. Sub-headings should be in lower case capitals and placed immediately next to the margin and the text should start from the next line. Further sub-heading should be lower case capitalized first letter only and placed next to the margin with colon. The matter would be in continuation of sub-heading.
 - 15.3.3. All symbols should be defined wherever they first appear and conform to the internationally accepted symbols.
 - 15.3.4. Tables should also be typed on A4 paper size. These should be numbered serially with the word 'Table' towards the left margin followed by title at the top of the table. Figure captions should be provided at the bottom of the figure.
 - 15.3.5. Reference cited in the text should be indicated by the author's name and the year of publication in parenthesis. These should not be numbered and should be typed at the end of the paper in the alphabetical order. The title of the work should be within inverted commas.
- 15.4. The Research Scholar is required to submit three copies of Ph.D. thesis (spiral bound) to the Office of Dean (Academic) through his/her supervisor(s) and the concerned HOD provided he/she has already submitted his/her synopsis.
- 15.5. The Research Scholar will submit a certificate from his/her research supervisor stating that the research work undertaken has been original and has not been published/printed anywhere else for the award of any degree.
- 15.6. A certificate from the Accounts Section of the institute stating 'no dues pending' against Research Scholar will also be submitted along with the thesis.



16. Evaluation of thesis

- 16.1. The thesis shall contain account of the research work carried out by the Research Scholar leading to discovery of new facts and should give evidence of originality either in interpretation of data, development of new experimental or theoretical techniques or definite contribution to the advancement of knowledge. The thesis should give evidence regarding the capability of the Research Scholar to do independent research work.
- 16.2. Along with the synopsis of Ph.D. thesis submitted by the Research Scholar, the supervisor(s) shall forward a panel of six external examiners comprising of three foreign examiners and three Indian examiners (in a sealed envelope) through proper channel to Dean (Academic). The examiners must be expert in the research area and preferably, their names may appear in the list of "References" in the Ph.D. thesis submitted by the Research Scholar Out of which the Chairman, Senate, shall appoint one foreign examiner and one Indian examiner for the evaluation of Ph.D. thesis. Dean (Academic) will obtain the willingness from the appointed examiners by sending them a copy of synopsis submitted by the Research Scholar the Chairman, Senate is empowered to amend the panel of external examiners submitted by the research supervisor(s).
- 16.3. After getting the willingness from the appointed examiners, Dean (Academic) will send two copies of spiral bound thesis to them for detailed evaluation. Dean (Academic) will convey to the thesis examiners that their evaluation reports should include:
- Definite statement as to whether the thesis is acceptable or not acceptable for the award of Ph.D. Degree.
 - List of questions to be asked or clarifications to be sought from the Research Scholar during the viva-voce examination.
 - The detailed statement regarding the quality of the work undertaken.
 - Statement whether the quantity of work done is sufficient for the award of Ph.D. Degree or not.
 - In case the examiners feel that definite Revision of the thesis is required or, the thesis is not acceptable in the present form and has to be completely re-written due to insufficient quantity and/or quality of research work undertaken, it should be clearly stated.
- 16.4. After receiving of the examiners' reports, the Photostat copies of the reports shall be forwarded to the concerned research supervisor(s) by Dean (Academic). The research supervisor(s) shall send his/her comments to the Dean (Academic) for further action.
- 16.5. If one or both examiners ask for complete/partial revision of the thesis, the Research Scholar will be asked to re-submit the thesis after incorporating the necessary changes in light of the comments of the examiner(s) within a period of six months. The re-submitted thesis may be sent to the same examiner(s) again for evaluation, if required.
- 16.6. If one or both examiners recommend the thesis for the award of Ph.D. degree, subject to minor changes, the Research Scholar will be asked to re-submit the thesis after incorporating the changes in light of the comments of the examiner within a period of three months. The re-submitted thesis may be sent to the same examiner(s) only if the Examiner(s) has mentioned about it in his/her report(s).
- 16.7. In case, both the examiners give positive/favourable reports, the thesis will be considered accepted. However, if one of the examiners gives positive/favourable report and the other rejects the thesis, then another copy of thesis shall be sent to a third examiner (same set of examiner) appointed by the Chairman, Senate from the panel already given by the research supervisor(s). If the report of the third examiner is found positive/favourable, then the thesis shall be considered accepted. In case, the third examiner rejects the thesis, then the Chairman, Senate will decide (on the basis of the reports of examiners), whether the thesis is to be rejected/or referred again to a new set of examiners for a fresh evaluation.
- 16.8. In all other cases, not covered by the above regulations, the matter will be referred to the RAC for consideration.
- 16.9. A Research Scholar whose thesis has been accepted for the award of Ph.D. degree shall be required to appear in Open House Viva Voce Examination before the following committee/panel.
- Director

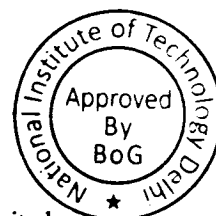


- ii. One of the External Examiners
- iii. Head of the concerned department
- iv. Research supervisor(s)

16.10. After satisfactory performance of the Research Scholar in the open house viva-voce examination, this committee shall forward its recommendations to the Chairman Senate for the award of Ph.D. degree to the Research Scholar. The Chairman Senate will recommend to the Senate for the award of Ph.D. degree to the successful Research Scholar.

16.11. The Research Scholar is required to submit at least five hardbound copies of his/her Ph.D. thesis as per the approved format along-with its soft copy (in a CD) in PDF format attached with each of the copies. The distribution of these copies is as follows:

- i. For central library
- ii. For departmental library
- iii. For the RS
- iv. One for each supervisor
- v. For the Office of Dean (Academic)
- vi. One additional softcopy of the thesis on CD meant for the UGC to be deposited



16.12. In case the Research Scholar fails in the open house viva-voce examination, he/she may be permitted to reappear in the open house viva-voce examination at a later date (approved by the Chairman, Senate) after the recommendation has been made by the RAC in this regard.

16.13. If the open house viva voce examination committee/panel finds that the performance of the Research Scholar is not satisfactory even on the second occasion, the matter will be referred to the Institute Senate for a decision.

16.14. **Depository with UGC:** Following the successful completion of the evaluation process and announcements of the award of Ph.D., the Institute shall submit a soft copy of the Ph.D. thesis to the UGC within a period of thirty days, for hosting the same in INFLIBNET, accessible to all Institutions/Universities.

16.15. **Issuance of Provisional Certificate:** On successful completion of the Open House viva after evaluation of thesis the candidate shall be issued a provisional certificate certifying to the effect that the Degree has been awarded in accordance with the provisions of UGC Regulations-2009 for Minimum Standards and Procedure for Award of Ph.D. Degree.

17. Award of Degree

If the performance of the Research Scholar has been satisfactory in the open House viva-voce examination as per Clause 16, he/she will be awarded Ph.D. degree on the recommendations of the Senate and with the approval of the Board of Governors. The day Chairman, Senate has recommended to Senate for the award of the degree to a Research Scholar shall be considered the date of award of degree.

18. Conversion of full-time admission to part-time for RS

The Research Scholar (full-time) may be allowed to continue as Research Scholar (part-time) if he/she satisfies the following conditions:

- i. The request from the Research Scholar in this regard is made to Dean (Academic) through proper channel and he/she has already passed the prescribed course work.
- ii. His/her progress report by his/her supervisor(s) is found satisfactory.
- iii. In case, he/she has been offered a regular job in some organization, then he/she may obtain a 'no objection certificate' from his/her employer to continue his/her research work as a part-time Research Scholar at NIT, Delhi and enclose along with his/her request for the purpose.
- iv. The Research Scholar may be allowed to register as part-time candidate only after the recommendation of the RAC and approval of Chairman, Senate.
- v. The full-time Research Scholar after conversion to part-time Research Scholar shall not be considered for any scholarship/stipend/contingency grant/teaching assistantship as meant

for full-time Research Scholar

- vi. All rules and regulations of part-time programme shall be applicable for such Research Scholar Further, once changed to part time candidature; the concerned Research Scholar cannot revert back.
- vii. Sponsored faculty from the recognized institutes, who joins the Ph.D. work at NIT Delhi as Full-Time Research Scholar, are also allowed to be converted as Part-Time Research Scholar (on request) after completion of 24 months as Full-Time candidate.

19. Stipend cum Teaching Assistantship/Scholarship and Contingency grant

Stipend cum Teaching Assistantship/Scholarship and Contingency grant shall be given to the admitted candidates as per the latest notification of the MHRD in this regard. However, Stipend cum Teaching Assistantship/Scholarship and Contingency grant to the candidate working under the Sponsored Projects coordinated by the faculty of the institute shall be given as per the terms and conditions of the project.

20. Remuneration to Examiner(s)/Supervisor(s)

The remuneration payable to each examiner(s)/supervisor(s) shall be decided by the Institute from time to time.

21. Right to amend the Regulation

The chairman, Senate shall be empowered to modify or append any regulation(s) from time to time or in case of any dispute.

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