

Award of Ph.D. Degree and Academic Deficiencies for Ph.D. Students

1. **Award of Ph.D. Degree.** On recommendations of the FBS of the constituent institution, the University will award the degree of Doctor of Philosophy to the student who satisfies the following conditions. Institution/department may specify additional requirements if considered necessary:

- a. **Coursework.** The minimum coursework required will be 18 credits of 800/900 level courses or equivalent. These 18 credit hours will be in addition to the pre-requisites specified by the Ph.D. Evaluation and Acceptance Committee (PEAC) of the concerned Institution.
- b. **Migration shall not be allowed in the Ph.D. Programme.** Any student joining the Ph.D. programme shall complete all the requisite courses in line with NUST/HEC policy.
- c. **Cumulative Grade Point Average (CGPA).** The minimum cumulative GPA required will be 3.5 out of 4.0 in the 18 credit hours of 800/900 level courses to be counted towards a Ph.D.
- d. **Ph.D. Qualifying Examination.** Each student must pass each paper of Part A - the subject examination of Ph.D. comprehensive examination with a minimum of 65% marks and Part B – the Oral Examination, (defence of synopsis) by majority vote. For Ph.D.in Business Administration, each Ph.D. student will have to pass two examinations in respect of Part A (the Subject Examination), viz, Comprehensive Examination 1, covering themes and topics included in the compulsory core courses, and Comprehensive Examination 2 covering themes and topics included in the specialization field courses.
- e. **Approval of Thesis Synopsis.** Each student must carry out a literature survey and prepare a written synopsis of the intended topic of research and present the same along with the research plan at the beginning of Part B (the Oral Examination) of the Qualifying Examination for approval.
- f. **Thesis Credits.** In addition to the coursework, all doctoral students must register for at least 30 credits of doctoral research.
- g. **Publications.** A student must have a minimum of two research publications, related to Ph.D. research work, as 1stauthor fulfilling under mentioned requirements:

(1) **Engineering / Sciences / Computer Science and related disciplines:**
Minimum two research papers published in Journals with WoS-JCR

Impact Factor. Out of these publications, at least one research paper should be in HEC “X” category journal.

OR

Minimum one research paper published in Journals with WoS-JCR Impact Factor and one paper presented/published in Core A/A* ranked international conference. Out of these publications, at least one research paper should be in HEC “X” category journal.

(2) Social Sciences/Management Sciences:

Minimum two papers published in journals of repute. Out of these publications, at least one research paper should be in HEC “X” category or higher journal.

OR

Minimum one paper published in journals of repute and one paper presented/published in an international conference. Out of these publications, at least one research paper should be in HEC “X” category or higher journal.

Note: This policy has to be read along with the current HEC policy on the subject. However, any subsequent amendment in the HEC policy can be considered subject to the approval of ACM.

- h. **Successful Evaluation Report of Research Thesis.** Out of the Thesis Evaluation Committee, the positive report by the supervisor and cosupervisor (if appointed), two local external Ph.D. experts, and two foreign experts (Ph.D.) are essential.
- i. **Thesis Defence.** Successful defence of the Thesis and approval by a majority vote of the Doctoral Defence Committee is required.
- j. **Submission of Thesis.** Five bound copies of the thesis may be submitted after successful defence within 60 days from the date of the thesis defence. A request may be made to Main Office NUST to relax the period of thesis submission to incorporate any additional requirement of the Defence Committee. Documents required at the time of submission of the thesis will be in sync with the latest policy directives of HEC / Accreditation Bodies along with the approval of the competent authority.

2. Coursework

- a. A selected Ph.D. candidate will take a minimum of 18 credit hours of 800/900 level courses at the Ph.D. level, as specified by the student’s GEC. These 18 credit hours shall be the courses that have not been counted towards any other degree, as, in compliance with the HEC Quality Assurance Criteria, courses

counted towards any other degree cannot be double-counted towards Ph.D. coursework.

- b. The GEC may specify additional subjects to be taken by the Ph.D. student, if considered essential. These will be notified as “Additional Courses” and will not be counted towards the calculation of CGPA.
- c. In addition to the minimum 18 credit hours coursework, the pre-requisite courses, prescribed by PEAC at the time of admission, would also be included in the Ph.D. transcript, and will also be notified as “Additional Courses”. These additional courses will not count towards the calculation of CGPA.
- d. The CGPA is calculated only based on the 18 credit hours of courses taken by the student at the Ph.D. level.
- e. The institution will intimate the results of a Ph.D. student to the Main Office, NUST Examination Branch, for notification as followed for other programmes.
- f. To complete the coursework, a student should take 3x courses, from the prescribed Ph.D. coursework. On the recommendation of GEC and Commandant/Principal/Dean, he/she may take 3x relevant/adequate courses offered by other institutions of NUST.
- g. The University follows the policy to workout GPA by awarding relative grading on the scale of 1.00 to 4.00 points according to the distribution curve based on the performance of a particular class by the faculty.

3. **Qualifying Examination.** After successful completion of 800/900 level courses to be counted towards the student’s Ph.D. with a minimum cumulative GPA of 3.5 out of 4.0, the student will take a qualifying / comprehensive examination in the subjects to be specified by the GEC. Qualifying Examination Part-A & B is to be conducted within 6 months after completion of coursework. The examination shall be conducted in two parts in the following manner:

- a. **Part A - Written Comprehensive Examination.** Question papers for the written comprehensive examination shall be prepared by the subject specialists and supervised by the concerned HoD. In case the HoD is also the student's supervisor, the Dean of the institution shall supervise the examination. The comprehensive examination shall be based on the entire Ph.D. coursework plus subjects considered essential for the intended area of research. It shall consist of two papers, one covering the student’s major area of research and the other covering the allied or supporting subjects. The minimum passing marks for each paper in Part A shall be 65%.
- b. **Part B - Oral Examination.** The Dean will chair the Oral Comprehensive Examination Committee meeting with HoD and the other members of the GEC

as its members. HoD and Dean/ Commandant/ Principal would be voting members only if Ph.D. qualified in the relevant field. Oral Examination shall be designed to ascertain the in-depth knowledge, analytical abilities, and aptitude of the student in the area of Ph.D. research. The student shall defend the thesis synopsis as a part of this oral examination. The Oral Examination Committee shall determine, by majority vote, whether the student be allowed to proceed for the doctoral research or otherwise. If the number of votes for “Pass” equals the number of votes “Fail”, then the verdict of the supervisor would be taken as the final decision.

- c. The qualifying examination shall be conducted as soon as possible after the completion of the course work but, in any case, Part A of the Qualifying Examination shall not be delayed for more than 03 months from the date of the last paper. If a student fails in either paper or both of Part A examination in the first attempt student shall appear in retake (one chance only) examination of the relevant paper(s) within 03 months of the first attempt. Part B of the Qualifying Examination will be conducted within 03 months after the student qualifies Part A of the Qualifying Examination. If a student does not pass the Part B examination in the first attempt, the student shall appear in retake (one chance only) examination within 03 months of the first attempt. Upon a failure in Part B, each committee member will submit a comment page, clearly documenting the student’s views/suggestions. These comments pages, duly signed by respective committee members, shall be submitted to Post Graduate Programme Directorate and Examination Branch at Main Office NUST by the concerned institution. A duplicate copy of these comments will also be provided to the student.
- d. During retake of qualifying examination Part A or Part B, one new member must be added to the Examination committee. Main Office NUST (Examination Branch) will notify the result of the Qualifying Examination.

4. **Withdrawal from Ph.D. Programme.** A student will be withdrawn from the Ph.D. degree programme under the following circumstances/conditions:

- a. CGPA remains below 3.50 on completion of coursework even after availing three chances for improvement of grades.
- b. Fails twice in any part of the qualifying examination i.e., Part A or Part B. Fails to qualify both parts of qualifier within 12 months, except recommended by FBS otherwise, by clearly stating the extended duration. 12 months' duration will be counted from the date of the last paper of coursework.
- c. On consistent three unsatisfactory academic performances graded by Monitoring Cell, Academics Dte and Supervisor and consequent recommendation by FBS.

- d. On disciplinary grounds when recommended by the respective Discipline Committee of the Institution and Discipline Committee of NUST.
- e. Absence for 60 or more consecutive days without valid reasons.
- f. Fails in one or more course(s).
- g. Fails to complete coursework requirements in three years.
- h. Fails to complete Ph.D. degree requirements within the maximum allowed time (i.e., 8 years).
- i. A student can seek withdrawal from the Ph.D. programme at any stage of their respective degree at their own request duly recommended by the FBS of the institute.

5. **Improving Cumulative GPA.** Out of the coursework counted towards Ph.D., a student may repeat the course in which the student received the grade point of less than 3.5 but greater than or equal to 2.0, to improve cumulative GPA, if it is below 3.5 before taking the qualifying examination. The procedure for repeating is as under:

- a. The candidate will apply to the Supervisor for permission to repeat a course. The case will be presented before the GEC for deliberation/approval.
- b. The student will repeat a course that is permitted by the GEC. On repeating the course, the student will get an earned grade. The student's transcript will show both the old grade and the new earned grade, but the better grade will be used in the computation of CGPA.
- c. The student will have to repeat the course within the time limit given by the GEC.
- d. A student will be allowed to repeat a maximum of three courses only during the entire Ph.D. coursework.
- e. If an elective course cannot be offered for repetition due to unavoidable circumstances, a student may take an alternative elective course with the approval of GEC and will get the earned grades. The student's transcript will show both the old grade and the new earned grade, but the better grade will be used in the computation of CGPA.

6. **Research during Ph.D. Programme.** The procedure for the thesis is as follows:

- a. All students must successfully complete a minimum of 30 credits of creative Ph.D. research, based on a highly individualized, investigative, and creative

study which will make a significant contribution to knowledge in the form of new findings/inventions.

- b. A student with CGPA below 3.50 will not be allowed to take Ph.D. Research.
- c. The subject of research will be agreed upon by the student and the research Supervisor (thesis supervisor), in consultation with the GEC, when required. It must be original and not plagiarized.
- d. A student who cannot complete the research work in the assigned time may continue to do so at own arrangements/expenses to complete the research

work within the maximum time allowed as per policy in vogue after the prescribed "on-campus" time.

7. **Guidance and Examination Committee (GEC).** A Doctoral GEC will be formed at the earliest after the acceptance of a student into the Ph.D. programme but not later than one month of the student's joining date. The GEC will comprise at least three Ph.D. members in addition to the supervisor and co-supervisor (if appointed), and one member of GEC will be external from other reputed universities/R&D organizations/ relevant industry or constituent institutions/ organizations of NUST. The supervisor must be a Ph.D. degree holder with his name included in HEC approved list of supervisors. The Head of the Department in consultation with the student and respective supervisor and also with the approval of the Commandant/Principal/Dean will appoint the GEC. Form Ph.D.-3A and Form Ph.D.-3B will be used for the formulation of GEC, and petition for any change of GEC/research topic respectively. The student's supervisor will chair the GEC meetings. The GEC meetings will be held at least once in six months. The proceedings of GEC meetings will be recorded on Form Ph.D.-3C and distributed to all concerned. Principal/Dean/HoD must ensure the conduct of GEC meeting if a student/supervisor fails to manage within 8 months.

8. **Evaluation of the Research Thesis**

- a. The Ph.D. thesis will be evaluated by a Thesis Evaluation Committee. The committee will comprise the GEC, and at least four external evaluators, two of whom shall be foreign renowned faculty from technologically advanced countries.
- b. Evaluation report by the thesis supervisor/co-supervisor, at least two local external evaluators, and two foreign evaluators have to be positive before the student can be asked to carry out the final defence.

9. **Thesis Defence.** On receipt of positive reports from the thesis Evaluation Committee, defence of a Ph.D. thesis will be conducted as under:

- a. The schedule of thesis defence of a Ph.D. student shall be announced by the institution at least 4 weeks before the defence to all NUST institutions and Main Office NUST for maximum participation.
- b. The Defence Committee will comprise the student's GEC and four external experts (i.e., two local and two foreign experts who were part of the Thesis Evaluation Committee). The participation of atleast one foreign expert will be mandatory through video conferencing.
- c. The student will provide copies of the research thesis to all the members of the Defence Committee at least 4 weeks before the defence date and 8 weeks in case of foreign experts.
- d. The student will present work to the defence committee on the given date and time.
- e. The Defence Committee will give its decision with a majority vote and intimate Main Office NUST about the decision for final notification. 5x bound copies of the thesis along with 5x soft copies on CDs will be prepared by the student. 1xcopy for the institution Library, 1x copy for the Student's Supervisor, 1x copy for Examinations Branch Main Office NUST, who will forward it for placement in NUST Central Library after the publication of gazette notification for onward submission to HEC, and 1x copy for the concerned student.
- f. Any plagiarism in Ph.D. research work and fake documents submitted by the student, even those submitted at the time of admission will result in the cancellation of the degree.

10. **Specific Requirement/Provisions**

- a. **Co-Supervisor.** In case a student requires special coaching in a particular subject for a respective research topic for which the supervisor cannot provide necessary guidance, a co-supervisor may be appointed from within institution (faculty members) or from outside universities/ institutions/ R&D organizations or relevant industry. A student can also have a Cosupervisor/GEC member from a foreign University.
- b. **Deferment of Semester(s).** A student may seek deferment from regular studies subject to the following:
 - (1) Deferment will generally be requested before the start of a semester. However, in exceptional cases, it may be requested latest by the end of 2nd week of a semester. It will be endorsed by the FBS and processed for formal approval by the Director Postgraduate Programmes.

- (2) During the period of deferment, the student will be allowed to repeat courses already studied on payment of a prescribed fee for the repetition of courses but not permitted to study new courses.
 - (3) The student shall pay a 25% tuition fee to maintain his/her own registration.
 - (4) The student has the requisite time available to complete his/her degree within the stipulated time.
 - (5) In case a student opts to defer the first semester, s/he shall have to pay a 50% tuition fee (non-adjustable/non-refundable).
- c. **Payment of Tuition Fee.** Ph.D. students will be charged a full tuition fee for 3 academic years (6 regular semesters). Thereafter, if the student has completed respective coursework, the student will not be required to pay any tuition fee till completion of degree requirements. However, the fee during Summer Semester will be credit hours based.
- d. **Suspension of a Semester.** A Ph.D. student may be recommended for suspension of a semester upon recommendation of FBS for the following conditions:
- (1) Suspension on disciplinary grounds
 - (2) Suspension on medical grounds
 - (3) Suspension on prolonged absence
 - (4) Suspension on reasons beyond students' control or authorized grounds/sanctioned leave from the competent authority
- e. **Posting Out of Supervisor.** If a supervisor leaves the institution/ NUST or proceeds on long leave (i.e., leave for more than six months) then the institution must appoint a new supervisor from the institution and an outgoing supervisor may be appointed as co-supervisor if required. Institutions are to ensure all such changes before processing the leave of the concerned supervisor. In case, a faculty member wants to continue as a supervisor and proceed out of NUST (for more than 06 months) the following conditions must be fulfilled:
- (1) The student must have published at least 1x journal paper of the required category.

- (2) Upon fulfilment of requirement at sub-para above, a meeting is to be conducted before processing of long leave of Ph.D. supervisor. Both supervisor and student must agree to continue their research amicably with taking the institution fully into the loop. This meeting is to include:
 - (a) Principal
 - (b) Dean
 - (c) Rep of Academics Dte
 - (d) Supervisor
 - (e) GEC members
 - (f) Student
 - (g) Co-supervisor (to be appointed from the institution)
- (3) The supervisor has to be preferably physically present during PPCM and thesis defence of the concerned student.
- (4) Co-supervisor must be appointed from the institution.

11. **Evaluator Selection.** For the selection of external experts, the institution concerned will forward a list of at least four foreign and four local external experts to the Academics Directorate, from which the Ph.D. Processing Committee will select at least two foreign, and two local external experts to whom the thesis will be sent for evaluation. Research Directorate will facilitate in finding foreign experts in case of any difficulty. Furthermore, the following must be ensured before selection of Foreign/Local Evaluators::

- a. PPCM for the selection of Foreign/Local evaluators for Ph.D. thesis is held at least six months before completion of maximum Ph.D. tenure.
- b. A student must attend 15 Ph.D. defence/International and National conferences before respective evaluators selection. A record of the same countersigned by the supervisor is to be included in the documents forwarded for evaluators' selection.
- c. At least one seminar (Pre-defence) shall be conducted by every Ph.D. student on their own research thesis before an audience, before evaluators' selection and thesis defence.

12. **Permission for Foreign Universities Research/Visit of Ph.D. Scholars.** Ph.D. students of all institutions undertake 6 months or more research/visit at foreign universities, the following documents/information are required to be provided to Academics Dte for processing of the cases of NOC/approval by Competent Authority:

- a. An application from the scholar duly recommended by the student's supervisor
- b. A copy of the award letter from the HEC/Sponsoring agency
- c. Acceptance letter from foreign University
- d. Up-to-date progress report of the scholar
- e. Qualifier exam report (Form Ph.D.-5)
- f. A certificate from the scholar duly countersigned by Commandant/Principal/Dean that the scholar will not ask for any additional expenditure from NUST.