

Tribhuvan University
Institute of Science and Technology
Dean's Office
Kirtipur

Regulations of Ph. D. Programme, 2071

The doctoral (Ph.D.) programme of Tribhuvan University Institute of Science and Technology (IOST) is intended for those who wish to develop career in teaching, research and advanced knowledge in the field of Science and Technology. The Ph.D. students are expected to achieve a high standard of academic excellence and contribute to scientific theory and/or experiment through original research.

The Ph. D. programme of IOST is regulated by the Research Committee (RC -IOST) constituted under the chair of the Dean in accordance with *Tribhuvan University Organization and Academic Administration Rule 2050, chapter 3, section 9*. The research committee frames its necessary working rules in compliance with the existing regulation. The Ph. D programme is conducted according to the following rules and regulations.

I. Entry Requirement

- 1.1. A candidate is eligible for enrolment and registration for Ph.D. programme of IOST provided he/she has secured at least second division at the master's level (M.Sc. in respective discipline or M.A. in Mathematics and Statistics) from Tribhuvan University or from any other University recognized by Tribhuvan University.

2. Role of CDRC (Central Department Research Committee)

- 2.1. The Central Department Research Committee shall undertake the academic and internal evaluation and review responsibility of Ph. D. programme.
- 2.2. The Head of Central Department shall form a five members Central Department Research committee including may be one subject expert from outside.
- 2.3. The Central Department shall manage meeting allowance for the CDRC meetings and try to generate resources for research.
- 2.4. The CDRC shall certify that most of the research works offered by the candidate is one which can be pursued in the Department or Campus.

3. Enrolment and Registration

A candidate interested to enrol into Ph.D. programme shall apply to the concerned Central Department, where he/she intends to work in a subject related to his/her research.

- 3.1. The application form (on approved format) and processing charge for enrolment in Ph.D. programme shall be available from the concerned Central Department of IOST on payment of the amount as decided by the Dean's Office.

- 3.2. The candidate shall get application every year in the months of January and July from the Central Departments of IOST. The application must include a research proposal CV (of candidate as well as of the Supervisor and Co-supervisor(s) including a list of publications), recommendation of the supervisor, no objection letter from employer, assurance letter of study leave from the employer (for full time research candidate)
- 3.3. The Central Department Research Committee (CDRC) shall evaluate the research proposal and application. The candidate shall have to defend the proposal in the Central Department to justify that he/she possesses adequate knowledge in the field of study proposed for the Ph.D. research. The CDRC shall also certify that the subject offered by the candidate is one which can be pursued either within the department, or any other concerned department or a research centre of Tribhuvan University or any other research institute recognized by the research committee. A letter of permission/consent of the Head of Department/Laboratory/Institute/Research Centre shall be attached along with the application.
- 3.4. After incorporation of suggestions (if any), the CDRC shall recommend the application to the Research Committee of IOST, for registration into the Ph. D. course. The Central Department shall forward the application to the IOST within three months.
- 3.5. IOST will organize meeting of the Research Committee to approve the recommendation of CDRC. The Dean's Office will inform the CD Head, the concerned institute, the candidate and supervisor about the decision on application within two months,(May-June/Nov-Dec). In case of approval, the candidate should get registered in the IOST.
- 3.6. Dean's office shall provide the candidate a provisional registration for one year. The candidate has to prove his/her research ability within one year. After receiving recommendation from the CDRC, the Research Committee of IOST will consider the candidate as a Ph.D. student.
- 3.7. The title of Ph. D. thesis shall be provisional at the time of registration. It shall be finalized six months before submission of the thesis, and approved by the Research Committee after recommendation from CDRC.
- 3.8. The candidate pursuing interdisciplinary research shall fulfill requirement as suggested by the CDRC before registration (see condition for interdisciplinary research).
- 3.9. If approved by the research committee, the candidate shall register into IOST by payment of registration and other fees decided by the Research Committee of IOST. The fees would be charged till the thesis is finally submitted to the department.
- 3.10. A Ph. D. student must attend the course/seminar organized by the concerned Department (CDRC)

- 3.11. After enrolment for Ph. D., the student shall not undertake any responsibility except research without approval of CDRC, at the recommendation of the supervisor.
- 3.12. A Ph. D. student shall not enroll for any other degree during the Ph.D. research period.
- 3.13. A Ph. D. candidate's registration would be cancelled if he/she violates any regulations and progress is unsatisfactory.
- 3.14. Research Centre for applied science and technology (RECAST) can conduct Ph. D. Program under the research guidelines of IOST. The RECAST should forward Ph. D. applications and thesis to IOST and IOST may take opinion from concern CDRC.

4. Condition for Interdisciplinary Research

- 4.1. IOST-TU, promotes interdisciplinary research. The candidate willing to enroll for Ph.D. in subject different from his/her M.Sc. must complete pre-requisites such as course work/ bridge course or fulfill the required background by teaching experience and publications.

5. Ph. D. supervisor(s) Qualification

- 5.1. Ph. D. Supervisor should be a permanent faculty member of IOST with a Ph.D. who should have at least two relevant publications in the international journal/indexed journal, besides the publication of his/her Ph.D. work. If the supervisor considers necessary, maximum of two co-supervisors can be involved. Co-supervisor should also have a Ph. D.
- 5.2. Number of Ph. D. students under a supervisor: A university teacher can supervise fixed number of Ph.D. students at a time as follows: Professor - 4, Reader - 3, and Lecturer- 2 students.
- 5.3. If a candidate requests the CDRC to change his/her supervisor showing a genuine reason the CDRC can entertain the application and recommend it if justified to the research committee. In case of such situation with co-supervisor, supervisor shall report CDRC accordingly with justification.
- 5.4. In case of a difference arising between a candidate and his/her supervisor and other matters. viz. transfer of supervisor, health problem, etc the CDRC shall report the matter to the Research Committee with recommendation for decision.
- 5.5. A faculty member who is going to retire after a one year from Tribhuvan University shall not enroll a Ph. D. student under his/her supervision. However, he/she can continue supervision for already registered student, and can undertake Ph.D. student as co-supervisor. However on special case Research Committee, Dean office will take a decision.

6. Supervision of Research Work.

- 6.1 A candidate must pursue research work at the Central Department or any other pertinent Department, Campus or research centre of Tribhuvan University for a duration of three years from the date of enrollment. However, with the recommendation of the supervisor and permission from Department, part of the work can be carried out in the research centre or laboratory/institute recognized by the CDRC.
- 6.2. In case of MOU with research organizations, the Ph. D. work can be conducted at that organization.
- 6.3. Ph. D. Research shall be monitored regularly by the CDRC and Campus/ research Committee (Science and Technology)CRC(ST). A Progress report by the Ph. D. student should be submitted in every six months to the Dean's office through the CDRC. The Ph.D. student shall present a seminar about his/her research work in the Central Department at least once a year as decided by the CDRC.
- 6.4. Responsibility of the supervisor shall be to guide the candidate in research, keep the log book of Ph. D. student, send the annual confidential report of the candidate, check the thesis and recommend for examination to CDRC if satisfied. The CDRC may seek advice or any other cooperation from supervisor and co-supervisor.
- 6.5. The supervisor and the concerned department/campus/ research center shall keep records of the progress and attendance of the candidate and forward a brief report on approved format about the progress of the candidate's work conducted by him/her as well as carried out outside the central department or some other institute. The candidate shall request the Head where he/she is working to send the attendance and progress report to the CDRC for approval.
- 6.6. Once the supervisor accepts the candidate for Ph. D, it is his/her responsibility to guide the candidate, and if the Ph. D. student is not regular, then he/she should inform to CDRC in time.

7. Time Requirement for Ph.D.

- 7.1(a) Full time researcher: The Ph. D. thesis of full time researcher shall be submitted only after the completion of three years of registration. However, for an exceptional work, evident from standard publications, the CDRC may recommend submission of thesis after 2 years of registration. If the candidate cannot submit the thesis within five year of registration it will be considered automatically cancelled.
- 7.1(b) Part time researchers: The PhD thesis of part time researcher shall be submitted after completion of five years from the date of registration. The thesis must be submitted within seven years of registration, and if not submitted, it will be considered automatically cancelled. This rule also be enforced to the part time researchers who were enrolled before amendment of regulations of Ph.D. programe, 2071.

As provision of IOST a full time researcher is considered as a researcher who will give his/her full time in research work with taking leave from their job otherwise that candidate will be considered as a part time researcher.

Fee: The registration and monthly fee for the part time researcher will be two time than that of of full time researcher. In case of full time faculty member of TU the monthly fee will be waived out by 50%.

7.2. Re-Registration: If a candidate fails to submit thesis as per rule 7.1, but has worked substantially, then he/she can request for re-registration on same topic and under same supervisor. He/she can get re-registered by submitting fresh application to the Central Department within a month of expiry of registration. In such case the candidate can submit thesis within two years, but not before six months of re-registration (full time researcher) whereas for part time researcher it will be within three years from the date of re-registration. If candidate fails to submit thesis within two years of re-registration for full time and three years for part time researcher then his/her re-registration will be automatically cancelled. The fee shall be double than their normal registration period for both the cases.

7.3. Before submission of the thesis, the candidate has to present research work in a pre-submission seminar organized by the CDRC. The CDRC must send the report on this presentation with recommendation to the research committee of IOST.

8. Attendance

8.1. All the Ph.D.students must show at least 80% attendance in the register kept at the Department or Campus.The supervisor must forward the attendance to CDRC through Campus Chief/ Department Head.

9. Thesis Format and Official Requirements

9.1. On completion of the research work the candidate must submit a soft copy and four copies of neatly computer-printed spiral bound thesis and its summary in a format approved by the Research Committee along with the recommendation of CDRC, which shall be forwarded to the Dean, IOST with necessary recommendations.

9.2. A candidate shall submit a declaration in writing in thesis through the supervisor to the effect that:

a. He/she has not submitted the thesis to any other institute, and

b. The thesis submitted by the candidate is the work of his/her own and is not on the basis for which the Ph. D. degree has been already awarded by any other University/Institute.

- 9.3. The thesis submitted for examination shall satisfy the following requirements:
- a. The thesis must render some substantial contribution to knowledge and show evidence of originality through the discovery of new facts and findings or the exercise of independence and critical power in interpretation of facts and theories, or the new interpretation of facts and theories.
 - b. It must also be satisfactory in terms of its language and presentation.
 - c. The thesis must be written in English.
 - d. The hard bound copies must be submitted to Dean's office after viva-voce.
- 9.4. At least two original research papers of the Ph. D. research work must be published in an indexed journal including one in international journal. Also, at least once, participation and presentation of research related papers in National / international seminars symposia / conferences is required.

10. Evaluation of Thesis

- 10.1. The research committee shall ask the supervisor to submit a minimum of seven names of experts in the related subject as a panel of thesis examiners out of which at least three examiners must be from overseas, and four from SAARC countries including at least one from Nepal.
- 10.2. The thesis shall be sent to three examiners, at least one from overseas and two from SAARC, appointed by the Research Committee. The examiners may recommend on the format that the thesis be accepted for the award of Ph.D.degree or that the thesis be rejected or that the thesis be allowed to be resubmitted with improvements as suggested by the examiners.
- 10.3. If there is a difference of opinions among the examiners in regard to the acceptance of the thesis, the following arrangements shall be made for the final decision.
- The thesis will be rejected, if two out of three examiners reject the thesis.
 - If one examiner rejects the thesis, it will be referred to a new examiner, for final decision, however, if the new examiner rejects it again, the thesis will be rejected.
 - In case any one of the examiner suggests that the thesis be allowed to be resubmitted with improvements or revision, the candidate will be asked to make the necessary improvements and revisions according to the suggestions made by the examiner(s).
 - The thesis must be resubmitted if so recommended by the examiner(s) only once, and it shall be examined by the examiner assigned by Research Committee.
 - A revised thesis must be resubmitted by the candidate within six months from the date of information on the decision of the research committee to him/her. The revised thesis shall reach to the IOST accompanied by the full

amount of examination fee within two weeks of the time allowed for the submission of thesis.

- 10.4. If the thesis is accepted, the candidate shall have to take an open oral examination (viva-voce), which will be conducted by the external examiner appointed by the Research Committee in presence of the Dean, CDRC, the concerned department, supervisor(s), members of research committee and other interested persons. In case the examiner appointed to conduct the oral examination (viva-voce) is not available, the Research Committee may appoint another examiner to conduct the oral examination (viva-voce) on given time.
- 10.5. The report of the examiners on the thesis as well as the examiner conducting oral examination (viva-voce) shall be finally considered by the Research Committee, and forward it for the Ph.D.degree to concerned authority.
- 10.6. In case of successful defense by the candidate the Dean shall notify the result in accordance with the decision of the research committee and publish the result and communicate it to the news media.
- 10.7. The Dean shall forward the result of the Ph.D. degree to the concerned authority for conferring the degree.

11. Ethical Issues

The Ph. D. researcher should maintain all the ethical issues pertinent to research. They are required to get permission of the concerned department or council or Community or individual as per the nature of the research. The Ph. D. researcher will conduct all the research activities complying with the existing laws, and rules/regulations of the country. TU-IOST will not be responsible for any consequences in failing to do so by the candidate.