

INDIAN STATISTICAL INSTITUTE
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RULES AND REGULATIONS FOR REGISTRATION FOR A PH.D. DEGREE
AND FOR SUBMISSION AND EVALUATION OF A THESIS FOR THE AWARD
OF THE PH.D. DEGREE

The Indian Statistical Institute awards the degree of Doctor of Philosophy (Ph.D.) for original research contributions in one of the following five disciplines: **Statistics, Mathematics, Quantitative Economics, Computer Science and QROR (Quality, Reliability & Operations Research)**. For obtaining a Ph.D. degree of the Institute, it is necessary for a candidate to register himself/herself for a Ph.D. degree of the Institute *in a specific discipline* and subsequently to submit a thesis embodying his/her research work in partial fulfillment of the Ph.D. degree of the Institute in that specific discipline. At present, the Institute has five **Ph.D. & D.Sc. Committees**, one for each discipline, appointed by the Council of the Institute with the following responsibilities: (a) to decide on acceptance of applications of candidates seeking registration for a Ph.D. degree of the Institute, (b) to conduct evaluation of submitted theses, and (c) to recommend award of the Ph.D. degree to candidates on their successful completion of requirements for a Ph.D. degree.

Procedure for Registration for a Ph.D. Degree of the Indian Statistical Institute:

In order for any candidate to be eligible to submit a thesis to the Institute for a Ph.D. degree in any of the five disciplines, namely, Statistics, Mathematics, Quantitative Economics, Computer Science and QROR (Quality, Reliability & Operations Research), it is necessary for the candidate to first register himself/herself for a Ph.D. degree of the Institute in one of the above disciplines. The rules and regulations governing registration for a Ph.D. degree of the Institute are described below.

A. For a candidate attached to the Institute as a Research Fellow and seeking to obtain a Ph.D. degree of the Institute in one of the five disciplines as mentioned above, **the registration for a Ph.D. degree has to be completed within two years from the date of his/her joining the Institute as a Research Fellow**. This rule will apply to all Research Fellows, irrespective of the source of funding of the Fellowship (e.g., I.S.I., CSIR, NBHM, UGC, etc.). Continuation of the Fellowship beyond two years will be contingent upon getting registered for Ph.D. degree of the Institute within two years from the date of joining as a Research Fellow.

To register for a Ph.D. degree of the Institute, an application on the prescribed form should be submitted by the candidate to the Ph.D. & D.Sc. Committee of the Institute for the specific discipline, with a copy to the Dean of Studies. The prescribed application form may be obtained from the Convener of the Ph.D. & D.Sc. Committee or from the Dean's Office or may be directly downloaded from the Institute's website. In order to be eligible to apply for registration for a Ph.D. degree of the Institute, a candidate has to satisfy the following conditions:

(i) Should possess at least one of the following degrees or diplomas awarded

by the Institute:

M.Stat., M.Math., M.S.(QE), M.Tech.(CS), M.Tech.(QROR), Post Graduate Diploma, Two/Three Year Advanced Statistician's Diploma, Senior Diploma in Statistics.

OR

Should possess a Master's degree of a recognized university/institution in a relevant subject (relevant to the discipline in which the candidate is seeking a Ph.D. degree)

[*Note:* For candidates determined to be **outstanding** by the relevant JRF selection committee or by the committee formed by the Dean of Studies as in paragraph **B** below, the above criteria may be relaxed to a Bachelor's degree of a recognized university/institution in a relevant subject.]

(ii) Should clear either the JRF selection test in the respective discipline, or a written test followed by an interview conducted by the respective RFAC.

(iii) Must also satisfy the course requirement as proposed by the respective RFAC [For details, see the item '*Coursework*' below]. However, the RFAC may waive all or some of the courses based on the performance of the candidate in a comprehensive written examination to be conducted by the RFAC. The structure of the comprehensive examination would be finalized later.

(iv) Should have been assigned a Ph.D. thesis supervisor [for details on this, see the item '*Thesis Supervisor*' below], by the Dean of Studies, on recommendation of the relevant Research Fellows Advisory Committee.

(v) Should submit to the relevant Ph.D. & D.Sc. Committee, a write-up of the

research problem(s) to be pursued by him/her towards his/her Ph.D. thesis, duly forwarded by the Ph.D. thesis supervisor(s) and the Chair of the relevant RFAC.

Coursework: A candidate applying for registration for a Ph.D. degree of the Institute will be expected to possess a broad knowledge in the discipline in which he/she is seeking a Ph.D. degree. In order to ensure this, there will be a list of courses for each discipline (as decided by the respective RFAC) in which the Institute offers a Ph.D. degree. Each candidate will be required to successfully complete **at least five courses** from the list of courses for the relevant discipline and should have satisfactory performance in each of these courses. The RFAC will advise a candidate on the courses to be taken by him/her. Depending on the knowledge-base (checked through a comprehensive written test) of a candidate, the relevant RFAC may waive some or all of the courses. When a candidate applies for registration for a Ph.D. degree, the RFAC needs to certify that the candidate has successfully completed the required coursework in the relevant discipline.

Thesis Supervisor: For each candidate seeking a Ph.D. degree of the Institute, the Dean of Studies, on the recommendation of the relevant RFAC, will assign a Ph.D. thesis supervisor. Usually, the thesis supervisor will be **a faculty member of the Institute** (that is, a scientific worker of the Institute at the rank of a Lecturer or equivalent, and above). In exceptional circumstances, a candidate **may be assigned an external Ph.D. thesis supervisor**, if the RFAC so recommends, but **in all such cases**, the Dean of Studies of the Institute will have to assign, on the recommendation of the RFAC, **a joint Ph.D. thesis supervisor from among the faculty members of the Institute**.

Discipline for the Ph.D. Registration: Since the Institute awards Ph.D. degrees in five different disciplines, namely **Statistics, Mathematics, Quantitative Economics, Computer Science and QROR (Quality, Reliability & Operations Research)**, a candidate seeking a Ph.D. degree of the Institute needs to register himself/herself for a Ph.D. degree **in one of the above five disciplines**. Depending on the discipline in which a candidate intends to seek a Ph.D. degree, he/she would normally be placed by the Dean of Studies under the charge of an appropriate RFAC and would be required, under the supervision of the RFAC, to fulfill the coursework requirements for the intended discipline of the Ph.D. degree. In case of Research Fellows, **the subject-area of his/her work for a Ph.D. degree can be any one of the above five, irrespective of the subject in which**

he/she passed a JRF Selection Test. It may be noted that (a) Ph.D. research topics/problems are becoming increasingly inter-disciplinary and (b) the RFACs of the Institute are organized by Divisions/Units and not by disciplines. Therefore, if a candidate admitted as a Research Fellow in one discipline and placed under the supervision of an appropriate RFAC, proposes to work for a Ph.D. degree in a different discipline, then it will be the responsibility of the RFAC in charge to obtain the proposal from the candidate and get it evaluated by a committee of experts in the discipline in which the candidate proposes to work for a Ph.D. thesis. Such a committee must include among others, some experts in the discipline, who are also members of the relevant Ph.D. & D.Sc. Committee.

Note: For each of the five disciplines in which the Institute awards a Ph.D. degree, there is a list of courses. Each candidate is required to successfully complete at least five courses from the relevant list as a part of the requirement for a Ph.D. degree. The courses required to be taken by a candidate will be decided by the relevant RFAC. The list of courses for the different disciplines may be updated (by adding new courses or deleting existing courses) by the relevant RFAC and then such proposals may be forwarded by the RFAC to the Dean for approval of the Academic Council.

B. A candidate, who is **not attached to the Institute as a Research Fellow** and seeks to obtain a Ph.D. degree of the Institute in one of the five disciplines as mentioned above, must first **submit a letter of intent to the Dean of Studies**, mentioning the discipline in which he/she seeks to obtain a Ph.D. degree. On receipt of such a letter of intent, the Dean of Studies will arrange for **an interview of the candidate**, either by the appropriate JRF Selection Committee or by a committee formed by the Dean of Studies on the recommendation of the relevant RFAC. **Based on the performance in the interview, the candidate may be allowed to carry out his/her research work at the Institute and assigned to an appropriate RFAC by the Dean of Studies. Within two years from this date of assignment, the candidate should register himself/herself for a Ph.D. degree** of the Institute. The procedure and the eligibility criteria for application for registration **are exactly the same as** under paragraph A above.

Submission of Ph.D. Thesis:

After having registered for a Ph.D. degree of the Institute in one of the five disciplines mentioned above, a candidate should submit a thesis to the relevant Ph.D. & D.Sc. Committee **within five years from the date of registration**, in partial fulfillment of the award of a Ph.D. degree.

Prior to the submission of his/her Ph.D. thesis to the relevant Ph.D. & D.Sc. Committee, a candidate will have to:

- (a) submit a synopsis of the thesis to the relevant RFAC,
- (b) deliver a public seminar, organized by the relevant RFAC, on the research work to be included in his/her Ph.D. thesis.

At the time of submission of the thesis together with a synopsis of the thesis to the relevant Ph.D. & D.Sc. Committee, a candidate must also submit to the Ph.D. & D.Sc. Committee, a certificate signed by the thesis supervisor(s), certifying that the candidate has delivered a public seminar and has satisfactorily answered questions raised in the seminar.

It is the responsibility of the concerned Ph.D. & D.Sc. Committee to consider getting the thesis evaluated by the thesis supervisor(s) and by two external examiners selected by the Ph.D. & D.Sc. Committee and to subsequently arrange for the viva voce examination. Based on reports of the thesis-examination and the viva-voce examination, the Ph.D. & D.Sc. Committee will decide on recommending award of the Ph.D. degree and forward its recommendation to the Dean of Studies.

In case a candidate fails to submit his/her Ph.D. thesis along with a synopsis within five years from the date of registration for a Ph.D. degree, the registration will stand cancelled. In such a case, the candidate will need to get himself/herself registered for the Ph.D. degree once again before he/she can submit the thesis. For fresh registration of such a candidate, **rules and regulations for Ph.D. registration as stated in paragraph B above will apply.**