

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KALYANI

Ph.D. ORDINANCE & REGULATIONS

NOVEMBER 2017



DEFINITIONS

“Research” means systematic study or investigation in order to discover new knowledge in the form of facts/patterns or new interpretation of ideas or inventions of new devices.

“Doctor of Philosophy (Ph.D.)” signifies that the awardee of the degree has undertaken a substantial piece of original research, which has been conducted and reported by the holder under proper academic supervision, and in a research environment for a prescribed period.

“Research Scholar” means a student who is admitted to Ph.D. programme of IIT Kalyani through the procedures adopted by the Institute.

“Supervisor” means a person who is recognized by IIT Kalyani to supervise the research work carried out by the scholar/candidate for Ph.D.

“Co-Supervisor” means a person who is recognized by IIT Kalyani to supervise the research work of a scholar, jointly with a Supervisor.

“Departmental Research Committee (DRC)” is the Research Committee of the Institute. It shall be constituted by the Director with a minimum of three faculty members.

“Doctoral Scrutiny Committee (DSC)” is the monitoring Committee to monitor the progress of research of a scholar as defined in section 11.

“Senate” shall consist of Professors, faculty members selected by Director, and some external experts. Director will be the chairman of the senate.

ORDINANCE

1. The Indian Institute of Information Technology Kalyani awards the degree of Doctor of Philosophy (Ph.D.) in Engineering/Science to a candidate who has successfully completed the stipulated Programme of Research.

2. The Programme of Research with the governing rules and regulations are formulated by the Senate/Chairman with recommendation of DRC of the Institute. The Senate/Chairman with recommendation of DRC can modify or change the structure, the governing rules and regulations from time to time.

3. A candidate to be awarded Ph.D. degree should submit a thesis embodying the findings of his/her research carried out under this programme. The thesis should make an original contribution of high quality to the advancement of knowledge as judged by the experts in the relevant area.

4. A candidate becomes eligible for the award of Ph.D. degree after fulfilling all the academic requirements prescribed by the Senate/Chairman with recommendation of DRC of the Institute.

5. The award shall be made upon the recommendation of the Senate/Chairman with recommendation of DRC of the Institute after ratification by the Board of Governors of the Institute. The Ph.D. degree

shall be awarded in the discipline of the Department/Centre which registers the student for the Ph.D. programme.

REGULATIONS

1. CATEGORIES OF Ph.D. STUDENTS

The Institute admits Ph.D. students under the following categories:

1.1 REGULAR

A student in this category works full-time for his/her Ph.D. degree. He/she receives assistantship from the Institute or Fellowship from CSIR/UGC or any other recognized funding agency.

1.2 SPONSORED

A student in this category is sponsored by a recognized R&D organization, academic institution, government organization or industry for doing research in the Institute on a full-time basis. The Institute does not provide any assistantship/fellowship to such a student.

1.3 SELF-FINANCED

A student in this category works full-time or part-time towards the Ph.D. Programme. The Institute does not provide any assistantship/fellowship to such a student.

1.4 PROJECT-STAFF

This category refers to a student who is working on a sponsored project in the Institute and is admitted to the Ph.D. Programme to work on a full-time or part-time basis. The remaining duration of the project at the time of admission should be at least one year. If the project gets completed before the student completes his/her Ph.D. Programme, his/her category will be converted to that of SELF-FINANCED unless he/she is granted an assistantship/fellowship from the Institute or any other agency.

1.5 PART-TIME

A scholar in this category should be a professionally employed person (including the staff of IIIT Kalyani), who pursues the Ph.D. Programme while continuing the duties of his/her service. The Institute does not provide any assistantship/fellowship to such a scholar.

1.6 EXTERNAL

This category refers to a scholar employed in an R&D organization/academic institution/industry having adequate research facilities. The research work leading to the Ph.D. degree may be carried out largely in the parent organization of the candidate under a Local Supervisor from the organization but with the overall guidance provided by a faculty member (Institute Supervisor) of the Department/Centre in which he/she is registered. The Institute does not provide any assistantship/fellowship to such a student. Such a candidate will have to complete the course work and other requirements of the Institute and will have to take official withdrawal after completion of the requirements to continue work in his/her parent Institute. The Institute does not provide any assistantship/fellowship to such a scholar.

1.7 VISITING

A scholar in this category is a registered scholar in another university/institute in India or abroad. The Institute does not award any degree to such a student/candidate.

2. QUALITY IMPROVEMENT PROGRAMME

This category refers to a scholar selected under the Quality Improvement Programme(QIP) of the AICTE. The scholar works full-time in the Ph.D. Programme as per the rules and regulations of QIP.

3. CHANGE OF CATEGORY

The Senate/Chairman on recommendation of the supervisor can change the category of the candidate (except to regular category).

4. ADMISSION TO Ph.D. PROGRAMME

Eligibility Criteria

The details of the eligibility criteria for admission to various Ph.D. programmes are given in Appendix-I These criteria may be revised by the DRC from time to time.

5. ADMISSION PROCEDURE

Admission to the Ph.D. Programme of the Institute will normally take place in January and July every year. Advertisements will be issued in September/October for the even semester (January - June) and February-March for the odd semester (July - December).

5.1 Admission to all categories of students is granted on the basis of admission test followed by interview to be held usually during the month of December and May - July every year.

5.2 The following documents are to be furnished along with the application by candidates falling under Sponsored, Project Staff, Part-time and External categories:

Form I: Sponsorship letter for Sponsored category.

Form II: No objection certificate from Head of the Department/Head of the Institute, IIIT Kalyani, for Project Staff category

Form III: No objection certificate from the employer for Part-time category.

Form IV: Sponsorship certificate/ letter for External category.

All forms are available in Annexure B.

6. ASSISTANTSHIP

6.1 Institute assistantships will be available to eligible students/scholars as per prevailing norms.

6.2 Assistantships from external funding organizations will be available as per terms and conditions of the concerned funding organizations.

6.3 Students receiving assistantships from the Institute or fellowships from any other funding agencies, are required to perform academic duties as per prevailing norms.

6.4 The continuation of the assistantship/fellowship is subject to satisfactory performance of the assigned duties and satisfactory progress of the student /scholar in the Ph.D. Programme.

7. LEAVE RULES

7.1 Ordinary Leave

7.1.1 A full-time Ph.D. student is eligible for 30 days leave for every completed year (calculated in terms of two consecutive semesters, from the time of his/her joining the programme) Saturdays, Sundays or holidays during the leave period are counted towards leave, except for prefixed or suffixed holidays. Of the 30 days leave, a maximum of 15 days of leave is permitted in a semester. However, a maximum of 5 days of such leave is allowed to avail at a stretch if student having any

teaching assignment.

7.1.2 However, a student can accumulate leave, and avail a maximum of 30 days' leave at a time in a year. The maximum number of carried-over leave, from one completed year to another, is 15 days. Head of the Department/Centre sanctions leave on recommendation of the Supervisor.

7.2 Maternity/Paternity Leave

A scholar is eligible for 6 months maternity leave or 15 days of paternity leave as applicable only once during the Ph.D. Programme.

The Head of the Department/Centre sanctions maternity/paternity leave on recommendation of the Supervisor and submission of a certificate from Senior Medical Officer /Medical Officer of the institute.

7.3 Academic leave

Academic leave is permitted on the following grounds:

(a) To attend conferences/seminars/workshops/trainings/short-term courses. A maximum of 15 days of leave is permissible in a calendar year.

(b) A maximum of 30 days of leave in a calendar year is permissible for field trips such as data collection, survey work, etc.

The Head of the Department/Centre sanctions academic leave on recommendation of the Supervisor. Academic leave exceeding 30 days but up to a maximum of 60 days in a calendar year is approved by the Chairman, DSC on recommendation of the Supervisor and the Head of the Department/Centre.

Academic leave of more than 60 days but up to a maximum of 12 months is also permissible to carry out part of the research in another institute/R&D Lab/industry in India or abroad. For sanction of such a leave, a letter of consent from the host institute is required. This leave is permissible only after the scholar has passed the comprehensive examination and has done part of the research work at IIIT Kalyani. On recommendations of the Supervisor, the doctoral scrutiny committee (DSC), the Head of the Department/Centre approves such an academic leave. Such cases are also to be reported to Senate/Chairman. A scholar granted academic leave for one or more semesters, pays prescribed fees in every semester.

8. SUPERVISOR(S)

Every scholar being admitted to the Ph.D. Programme undertakes research under the guidance of a faculty member of the Department/Centre in which he/she is admitted. The faculty member is called

his/her Supervisor. In the case of an external category there is also a Supervisor in the parent organization (Local Supervisor).

A scholar (external category excluded) may have a second Supervisor(s) from the same or another Institute/Department/Centre. One of the supervisors will act as the Coordinating Supervisor. The Coordinating Supervisor has to be from the Department/Centre of IIIT Kalyani where the student is registered. The DRC nominates the Coordinating Supervisor.

The following categories of persons can act as one of the Supervisors but not as a Coordinating Supervisor

- i. A faculty nearing superannuation with less than 3 years of service left at the Institute.
- ii. A faculty on contract(including a Visiting Faculty) with less than 3 years of service left at the time of appointment as a Supervisor.
- iii. Professionals from industry for students other than external category. On recommendation of the supervisor, DRC appointment of such a Supervisor.

In special cases, a scholar admitted to a Department A can have as his sole supervisor a faculty from another Department B, unless either of the departments A or B do not agree. The reasons of disagreement must be given in writing and the matter will then be decided in a joint meeting of the Heads/ DRC chairmen of the two departments, the Dean Academic Affairs, and the Director. A faculty member F can take at most one student from outside his/her department in one academic year. The faculty F, and the department A will be identified before the admission takes place. In order to encourage such cross-disciplinary guidance, Department may be allowed an increase the intake capacity if required. The Heads will handle the official processes and faculty F will interact with the respective DRC chairman directly (without going through his/her Head) for matters relating to the concerned student. Reservation of slots can also apply in such cases.

9. APPOINTMENT OF SUPERVISOR(S)

9.1 The DRC proposes the Supervisor(s) for a student after obtaining mutual consent of both the scholar and the Supervisor(s). The Senate/Chairman will finally approve the allocation.

9.2 The Supervisor(s) is identified and appointed at the earliest and within six months from the date of admission.

9.3 A scholar under external category has one Supervisor from the Department/Centre in which

he/she is admitted and another from the parent organization (Local Supervisor). On recommendation of the supervisor, the Senate/Chairman approves the appointment of the Local Supervisor.

10. CHANGE/ADDITION OF SUPERVISOR(S)

10.1 If a student/ scholar has only one Supervisor and the Supervisor goes on leave for more than 15 (fifteen) months, one co-supervisor is to be appointed by the DRC. Mutual consent of both the scholar and Supervisor(s) is taken for such cases.

10.2 The Senate/Chairman may permit a scholar to change his/her Supervisor(s) for valid reasons. Mutual consent of the student and supervisor(s) and recommendations of the supervisor(s) is required.

11. DOCTORAL SCRUTINY COMMITTEE (DSC)

To monitor the progress of research of a scholar, there will be a Doctoral Scrutiny Committee with the following composition:

11.1 One faculty member other than the Supervisor(s) to be nominated by the Senate/Chairman.
(Chairman)

11.2 Supervisor(s) *(Members)*

11.3 Two other faculty members of which one should preferably be from another department wherever possible. *(Members)*

The DSC is constituted by the DRC in consultation with the Supervisor(s) within one month from the date of appointment of the Supervisor(s). The list is to be sent to the Senate/Chairman for approval. Until the DSC is constituted, the DRC will perform the duties of the DSC.

12. ENROLMENT

12.1 Students/scholars of all categories will have to enroll in person every semester on the stipulated date till the submission of their theses. They are required to pay the prescribed fees till the submission of their theses within stipulated dates.

12.2 A student may be exempted from the prescribed fees for the last semester if he/she submits thesis within 30 days from beginning of the semester.

12.3 Semester drop: Up to two semesters may be dropped in the entire duration of the Ph.D. Programme, on bonafide grounds. Except on medical grounds, semester drop is not permissible before successful completion of Comprehensive Examination by a student. On recommendation of the Supervisor, Senate/Chairman with recommendation of DRC approves a semester drop. No assistantship is provided during the period of a semester drop. The period of semester drop is not counted in the prescribed time limit for completion of the Ph.D. Programme.

13. COURSE WORK

13.1 The DSC of a scholar which prescribes the courses a scholar has to register for every semester. However, the Senate/Chairman with recommendation of DRC prescribes courses if the DSC is not yet constituted during the prescribed time period.

13.2 A student of Engineering/Technology Department with an entry level qualification of Master's degree registers for a minimum of 4 courses with at least 12 credits and has to obtain a CGPA of at least 6.5. Similarly, a student of Science Department/Centre with an entry level qualification of Master's degree registers for a minimum of 4 courses with at least 12 credits and has to obtain a CGPA of at least 6.5.

13.3 A student with B. Tech/ B.E. or equivalent qualification registers for a minimum of 6 courses with at least 24 credits and has to obtain a CPI or CGPA of at least 7.

13.4 Under normal circumstances, a scholar is required to complete all course work within two semesters, and registering for at least two courses in the first semester. In each semester, the CGPA should not be less than 6.0.

13.5 If at the end of any semester, a student maintains a CGPA of 6.0, but fails in a course, he/she will be allowed to repeat/substitute it in the following semester(s).

13.6 A repeat/substitute course may be registered during the summer term.

14. COMPREHENSIVE EXAMINATION

14.1 To test the overall competence and academic preparation of a student in the Ph.D. Programme, a Comprehensive Examination will be held within 18 months for students with Masters degrees and within 24 months for the students only with Bachelordegrees from the date of admission.

14.2 Comprehensive Examination will be held only after successful completion of course work.

14.3 The mode of Comprehensive Examination (oral or written or both) as well as the modus operandi (common to all students in a Department/Centre) is decided by the concerned department / DRC and will be intimated to the students.

14.4 The date of the Comprehensive Examination is informed to the student at least one month ahead. The department(s) conducts Comprehensive Examinations for all Ph.D.students/scholars.

14.5 A student failing in the Comprehensive Examination in the first attempt will be given a second attempt not before one month and within six months from the date of the first attempt. If the student fails in the second attempt, he/she will not be allowed to continue in the Ph.D. Programme.

15. REGISTRATION SEMINAR(RS)

15.1 Within 6 months of the successful completion of the Comprehensive Examination, a student presents a Registration Seminar (RS). The presentation is open to all. In this, he/she presents problem identification, literature survey, and preliminary research plan.

15.2 A student submits a write-up to the DSC members at least one week before the date of the RS.

15.3 A report on the successful completion of the RS, is submitted by the DSC to the

Chairman, DRC who communicates the same to the Director.

15.4 Within a month, a student delivers another RS if the first RS is not satisfactory.

16. PROGRESS REVIEW

16.1 After the Registration Seminar (clause 15), a scholar will have to submit at-least one progress report for yearly evaluation to the DSC. The DSC schedules a meeting where the student presents his/her progress report. All such presentations are open to all. However, the DSC may schedule more such meetings depending on the progress of the student scholar.

16.2 The DSC reviews the progress and submits a report to the DRC after every such review.

16.3 Based on needs, the DSC may fix a minimum number of working days (up to fifteen) twice a year for a scholar in part-time and external category to be present in IIIT Kalyani for his/her researchwork.

17. DURATION OF THE PH.D. PROGRAMME

17.1 The duration of the Ph.D. programme is as follows:

- i. The minimum duration of the Ph.D. programme (excluding dropped semester(s)/maternity leave) is four semesters after registration.
- ii. The maximum duration of the Ph.D. programme is 12semesters from the date of admission for a full-time student of which he can get fellowship of 10 semestersand 14semesters for a part-time student. The period will be counted after registration.
- iii. Any further extension can be approved by the competent authority.

18. SYNOPSIS OF THESIS

18.1 Prior to the submission of the thesis, a student submits the synopsis of thesis to the DSC.

18.2 The student makes a presentation of his/her thesis work before the DSC in an open seminar (named as Synopsis Seminar). The synopsis is submitted one week before the Synopsis Seminar date.

18.3 If the DSC approves the synopsis, the student is allowed to submit the thesis. The Coordinating Supervisor sends report of the Synopsis Seminar and Synopsis to the Senate/Chairman in consultation with DRC.

18.4 If a student fails to submit the thesis within 3 months from the date of the Synopsis Seminar, he /she shall present another Synopsis seminar. His/Her synopsis has to be approved by the DSC and sent to the Senate/Chairman.

19. PANEL OF EXAMINERS

19.1 Two external experts, one from India and the other from abroad, examine a thesis.

19.2 At least fifteen days prior to the submission of the thesis, the DSC submits to the Senate/Chairman a panel of six examiners, three each from India and abroad.

19.3 The list of examiners remains confidential with the office of the Director. The office of the Director makes all correspondence with the examiners. The name of the Indian examiner is made available to the HOD/HOC and the thesis Supervisor(s) after both the reports have been received.

20. SUBMISSION OF THESIS

20.1 Within three months of the acceptance of the synopsis by the DSC, the student submits seven
(or eight, if there are two supervisors) copies of his/her thesis in prescribed format to the Academic Section.

21. THESIS REPORTS

21.1 Examiners are expected to send reports on the thesis within two months from the date of receipt of the thesis.

21.2 If an examiner does not send his/her report within two months, reminders are sent. If the report is not received in spite of reminders, DRC may initiate the process to replace examiner.

21.3 If both the thesis examiners recommend the thesis for award of the Ph.D. degree, the Senate/Chairman with recommendation of DRC approves the conduct of a Viva Voce. Corrections in the thesis, responses to comments of examiners are ratified by the DSC.

21.4 If an examiner suggests re-submission of the thesis, the student is allowed to resubmit the thesis after due revision within the time stipulated by the DSC.

21.5 If one examiner recommends the thesis, and the other rejects, the report of the first examiner

is sent to the second examiner and vice-versa. The examiners are requested to review their recommendations. If after this, there is one acceptance and one rejection, the matter is placed before the Senate/Chairman and DRC for possible replacement of the examiner who has rejected.

21.6 If both the examiners do not recommend the thesis for the award, the reports are sent to the DSC which can decide on one of the following based on their assessment.

22. CONDUCT AND DISCIPLINE

22.1 Regulations for Conduct and Discipline are common for all students of IIIT Kalyani, and these are the same as that prescribed in the B. Tech Rules and Regulations.

22.2 In addition, unauthorized absence for more than one month leads to disciplinary action, in the form of reduction of assistantship or even termination of studentship.

23. CANCELLATION OF STUDENTSHIP

23.1 The Ph.D. studentship is liable to be cancelled for any of the following reasons:

- i. Giving false information at the time of application/admission.
- ii. Not conforming to the regulations of the programme.
- iii. Failure in coursework requirement.
- iv. Failure in Comprehensive Examination.
- v. Consistent lack of progress in research.
- vi. Violation of discipline and conduct rules of the Institute.

- vii. Not submitting a thesis within the stipulated period.
- viii. Not enrolling for a semester within stipulated dates.
- ix. Regular and Sponsored (Full-time) category students, remaining absent for more than 6 (six) weeks in a semester, without sanctioned leave.
- x. Registration in any course awarding degree from a recognized Institute/University/Organisation after Ph.D. registration.

Annexure A

ELIGIBILITY CRITERIA FOR ADMISSION INTO Ph.D. PROGRAMME

The details of the eligibility criteria (i.e., minimum qualifications and experience) for admission to various Ph.D. programmes are given in this appendix. The DRC reviews the same for admission to the Ph.D. programme from time to time. Relaxation in academic qualification for reserved categories of students is as per Government of India guidelines.

A.1 Ph.D. in Engineering

For admission to the Ph.D. Programme in Engineering departments, a candidate must satisfy one of the following criteria:

A.1.1 Master's degree in Engineering/Technology in a relevant area with a minimum CGPA of 6.5 or 60% of marks.

A.1.2 Bachelor's degree in Engineering/Technology or Master's degree in Science in a relevant area with a minimum CGPA of 7.5 or 70 % of marks. The candidate should be GATE/NET qualified.

A.2 Ph.D. in Science

For admission to the Ph.D. Programme in Science departments, a candidate must satisfy one of the following criteria:

A.2.1 Master's degree in Science in a relevant area with a minimum CGPA of 6.5 or 60% of marks. The candidate should be GATE/NET qualified.

A.2.2 Master's degree in Engineering/Technology in a relevant area with a minimum CGPA of 6.5 or 60% of marks.

A.2.3 Bachelor's degree in Engineering/Technology or Master's degree in Science in a relevant area with a minimum CGPA of 7.5 or 70% of marks. The candidate should be GATE/NET qualified.

A.3 Ph.D. in Humanities and Social Sciences

For admission to the Ph.D. Programme in the department of Humanities and Social Sciences (HSS), a candidate must satisfy one of the following criteria:

A.3.1 Master's degree in Arts/Commerce/Science in a relevant area with a minimum of 55% marks or equivalent of marks.

A.3.2 Master's degree in Engineering/Technology in a relevant area with a minimum CPI of 6.5 or 60% of marks.

A.4 Minimum Experience for Sponsored, Part-Time and External Categories

A.4.1 Candidate in Sponsored, Part-time and External categories must be a regular employee of the sponsoring organization with at least *one year* of professional experience in the respective field.

Annexure B

FORM I: SPONSORSHIP LETTER

(This should be typed on the letter head of the sponsoring organization)

Reference No:

Date:

To

The Director

Indian Institute of Information Technology

Kalyani - 741235

Sub : Sponsoring an Employee for Ph.D.Programme

Dear Sir/Madam,

We hereby sponsor the candidature of Mr./Ms./Mrs.who is an employee in our organization, for joining Ph.D. Programme inat your Institute as a full-time student.

It is certified that he/she has completedyear(s) of service in our organization/institute as a regular employee.

We shall relieve him/her of his/her duties in the organization during the two years of the Ph.D.programme.

Signature and seal of the Sponsoring Authority.

FORM II: NO-OBJECTION CERTIFICATE FOR IIIT KALYANI'S PROJECT STAFF

(This should be typed on the letterhead of IIIT Kalyani)

Reference No:

Date:

To
The Director
Indian Institute Information Technology
Kalyani - 741235

Sub : No-Objection Certificate for IIIT Kalyani's Project Staff

Dear Sir/Madam,

The concerned department of IIIT Kalyani, has no objection if Mr./Ms./Mrs.
a project employee in the projectunder.....department, is admitted to the Ph.D.
programme in

Principal Investigator of the concerned project/reporting head has agreed to allow him/her to
attend classes/research work during the Ph.D. programme.

Signature and seal of the
Head of the Department/
Head of the Institute

FORM III : NO-OBJECTION CERTIFICATE FOR PART-TIME STUDENTS

(This should be typed on the letter head of the sponsoring organization)

Reference No:

Date:

To
The Director
Indian Institute of Information Technology
Kalyani - 741235

Sub : No-Objection Certificate

Dear Sir/Madam,

We have no objection if Mr./Ms./Mrs.an employee in our organization, is admitted to the Ph.D. programme in at your institute as a PART-TIME student.

It is certified that he/she has completed year(s) of service in our organization/institute as a regular employee.

We shall allow him/ to attend classes/research works at IIT Kalyani during the Ph.D. programme.

Signature and seal of the Sponsoring Authority

FORM IV:SPONSORSHIP CERTIFICATE OF EXTERNAL REGISTRATION

(This should be typed on the letterhead of the sponsoring organization)

Reference No:

Date:

To
The Director
Indian Institute of Information Technology
Kalyani - 741235

Sub : Sponsoring an Employee for Ph.D. Programme for External registration

1. Name of the sponsoring organization:

Address:

2. Designation of the applicant:

3. Present status of the applicant:

4. List of Division/Section where research work is proposed to be done:

5. List of available local supervisor(s):

(Bio-data of local supervisor(s) to be enclosed giving details of designation, qualification, research experience with area of research etc. along with their consent for research guidance)

6. Details of relevant facilities which will be made available to the candidate:

It is certified that he/she has completedyear(s) of service in our organization/institute as a regular employee.

If Mr./Ms./Mrs.is admitted to the Ph.D. programme, we agree to relieve him/her to enable him/her to be available at IIIT Kalyani to attend classes for completion of his/her course works relating to the Ph.D. programme.

Mr./Ms./Mrs.will be permitted to carry out research leading to the Ph.D. degree at our organization under the guidance of selected local supervisor. The necessary facilities will be provided for the purpose.

Signature and seal of the
Sponsoring Authority