# Academic Guidelines 2021-22 Integrated PhD Programme (for 18IP &19IP batches)



#### **Integrated PhD Programme**

#### 1. Introduction:

The Integrated Doctor of Philosophy (IPhD) Programme at IISER Kolkata is aimed at attracting talented and innovative fresh undergraduate degree holders towards cutting-edge research in basic sciences. In the IPhD programme, the students are offered specialized coursework. In the Programme, they also carry out a project to acquire research and analytical skills before they embark on their research leading to the PhD thesis. At the end of the Programme students are awarded both the Master of Science and the PhD degrees.

Students are admitted through a department-level selection procedure comprising initial short listing on the basis of academic scores, a written test, and an interview.

Admission to the IPhD Programme is conducted across five departments - Biological Sciences, Chemical Sciences, Earth Sciences, Mathematics & Statistics, and Physical Sciences. The eligibility criteria for application to this Programme are uploaded in the Application Portal of the Institute website around March-April every year.

For the first two years they are treated as MS students and the rules and regulations pertaining to MS students would apply. From the 3<sup>rd</sup> year onward, they are treated as PhD students, and the rules and regulations pertaining to the PhD Programme would apply.

The following are the guidelines pertaining to this Programme.

#### 2. Credit Structure:

Total minimum credit requirement for IPhD is 112 and is spread over three years. The credits are assigned to a coursework comprising regular courses and a project. Please refer to the "Courses of Study" document in the website, under 'Academic'.

#### 3. Integrated PhD (IPhD) Project:

In the IPhD Project the student should ideally commence the research work leading to the PhD degree.

The distribution of the IPhD Project over the duration of the Programme can be different for different departments. There is credit assigned to the project work in each semester in this period, and evaluation is done on the basis of a presentation and a report. A project report has to be submitted in each of the project semesters, containing a literature survey, problem statement, and a detailed account of the research results. The student will have to make a presentation before the Research Progress Committee (RPC). An RPC will be assigned to each student in the 4<sup>th</sup> semester of the IP program. The Committee will conduct the Comprehensive examination, evaluate the student's 3<sup>rd</sup> year project and continue to evaluate the progress thereafter.

#### 4. Comprehensive Examination:

A comprehensive examination is defined as a means to evaluate a student's comprehensive understanding of his/her discipline, ability to pose scientific questions and grasp of the methodology of doing research. The examination will test whether the student has sufficient preparation to continue research as a PhD student.

- i. It will be held within the month of May in the 4<sup>th</sup> semester of the IPhD program. If a student fails, he/she will be given a second chance by mid-July of the same semester. When a student passes the Comprehensive, he/she will be considered as a Junior Research Fellow from the beginning of the 5<sup>th</sup> semester (Autumn Semester). If a student fails again, a decision will be taken on case-to-case basis.
- ii. Comprehensive examination will be conducted by the RPC upon recommendation of the concerned UGAC that a student has successfully completed two years' course work at MS level. In addition to the mandatory viva voce, a department may choose other means of evaluation, like written test.
- iii. Collection of grades of the IPhD students and updating the same in *WeLearn* will continue to be under the purview of the UGAC until the coursework is finished, irrespective of their comprehensive results.

iv. In case a student appearing for his/her Comprehensive Examination has other academic obligations, the academic and degree requirements of the Institute and the Programme should prevail over all other assignments.

#### 5. Supervisor:

In the semester in which the IPhD Project starts, the department PGAC committee will assign each student to a research supervisor, taking into account the following factors:

- i. The student's choice of supervisor, research interests and performance in the course work and consent of the faculty member concerned
- ii. A student may not change his/her IPhD Project Supervisor during the period of the Project, but may be assigned a co-supervisor, if approved by the supervisor.
- iii. The student may change his/her supervisor only once within the first month of the semester immediately after the completion of his/her IPhD Project work. Any further change of the supervisor is not allowed.
- iv. A student may join, with permission from the Heads of both the departments, an advisor from a department other than the student's parent department for his/her IPhD Project work starting from the 3<sup>rd</sup>/4<sup>th</sup> semester. However, to continue with his/her PhD work in the other department, he/she will have to fulfil the degree requirements of the parent department (including the Comprehensive Examination, and he/she will have to take a minimum of two courses from the PhD coursework of the other department. In addition, he/she will be assigned a Program Advisor from his/her parent department. His/her PhD degree will be awarded from his/her parent department.

#### 6. Fellowship Structure:

- i. An IPhD student will get the basic scholarship (12,400/-per month w.e.f. 01.04.2019 from 18IP batch) for the first two years (month of August in the 1st year to the month of July in the second year) provided his/her CGPA does not fall below 6.0 and/or he/she does not have any backlog. The scholarship will be restored if the CGPA goes above 6.0 in the subsequent academic year.
- ii. The student will be entitled to get the Institute JRF Scholarship (PhD scholarship) provided that he/she has passed the Comprehensive Examination. The entitlement starts from the third year (month of August in the 5th semester).
- iii. Upgradation to the SRF position and fellowship will be governed by the rules of the Institute-funded PhD Programme. An IPhD student will be eligible for SRF upgradation at the end of the fourth year, if it is recommended by the Research Progress Committee.
- iv. IPhD Students admitted till 2019 will be entitled to get full fellowship for a total period of 7 years (2 years MS+ 5 years PhD).

## 7. External Funding:

- i. IPhD students are strongly encouraged to apply for external fellowships (such as CSIR, UGC, INSIPRE etc.). However, an IPhD student cannot activate his/her external research fellowship unless he/she qualifies the Comprehensive Examination conducted by the concerned Research Progress Committee (RPC).
- ii. If an IPhD student activates his/her external fellowship before completing the credit requirement of the IPhD Programme, but eventually fails to clear one or more of the required courses or the IPhD Project up to the end of his fourth year after admission, the student will have to quit the Programme regardless of the fate of his/her external fellowship.

#### 8. Promotion Policy:

Please refer to BS-MS promotion policy of the BS-MS Academic Guidelines.

#### 9. Termination of studentship:

Please refer to BS-MS promotion/termination policy of the BS-MS Academic Guidelines.

#### 10. PhD Thesis:

- i. Once the student passes the Comprehensive Examination, she/he will be considered as an Institute JRF from the beginning of the third year.
- ii. Once the credit requirement (112 credits) is completed, the rest of the IPhD Programme will be regulated by the guidelines of the PhD Programme.
- iii. The PhD Thesis of an IPhD student may not be submitted and defended before the end of the fourth year after admission, and the PhD degree may not be awarded before the Convocation at the end of the fourth year.
- iv. The format of the thesis will be the same as prescribed for the PhD students.

### 11. Master's Degree:

- i. The IPhD Programme in IISER Kolkata is a PhD Programme, and the Institute expects the students of this Programme to finish their PhD in the Institute. A successful defence of the PhD thesis is qualification for the award of both Master's (MS) and PhD degrees.
- ii. However, an Integrated PhD student is eligible to receive a Master's degree (MS) from the Institute if he/she completes all 112 credits with grade D or above and qualifies the Comprehensive Examination. The degree, nevertheless, will not be awarded unless the student quits the Programme and solicits the degree.
- iii. The Master's degree will be awarded only at the Convocation ceremony. The student who has fulfilled or is expected to fulfil the eligibility criteria for the Master's degree during a Spring semester, and intends to receive the degree in the Convocation ceremony, must state his/her willingness to quit the Programme. A Master's degree may be awarded to such students in the following Convocation subject to the Senate's approval.
- iv. IPhD students who shall request for MS degree for an early exit from the Programme (post-MS), should submit their MS Project Report.
- **13. Registration:** Registration of IPhD students admitted till 2019 will be valid for 7 years.
- **14. Orientation:** Each department conducts an orientation for the fresh batch of IPhD students, normally within two working days of IPhD registration. During the orientation the concerned HoD welcomes the students and introduces them to the departmental UGAC Convener. The students are briefed about the course choices, department's activities and about general IPhD rules. The students have to register to the courses of the semester before the commencement of classes, avoiding timetable clashes.
- **15.** After Completion of PhD degree students admitted under IPhD Programme have to submit one special declaration along with the general declaration submitted by the students admitted under PhD Programme. The Senate approved format of the same is given below.

# Declaration of Authorship of the IPhD Thesis

| I,   |
|--|
| [Title of thesis]  |
| I confirm that:  |
| 1. This work was conducted by me primarily as a PhD candidate at IISER Kolkata;  |
| 2. To maintain the coherency of my work in the Integrated PhD Programme, if any of the part of this PhD thesis has previously been taken for my MS Project Report, I have clearly stated it. Other than this it has not been previously submitted, in part or as a whole, to any university of institution for any degree, diploma, or other qualifications; |
| 3. Collaborations of others have been mentioned with explicit acknowledgements and clear citations. My own contribution is also clearly outlined whenever a work has jointly been carried out with a collaborator;   |
| 4. The work that have been published in peer reviewed journals are reported here in compliance with the copyright issues of the journal and do not violate the publication norms of the publisher. If there is any violation or infringement of Intellectual Property Rights, I take its full responsibility.  |
| 5. This thesis also follows the research ethics of IISER Kolkata.  |
| Signature:   |