

ACADEMIC GUIDELINES 2020

PhD Programme



6. PhD Programme

6.1. Introduction:

The goal of the Doctor of Philosophy (PhD) Programme at IISER Kolkata is to introduce students to cutting-edge research and to stimulate their intellectual development. IISER Kolkata strives to provide world-class training to its PhD students so that they gain the confidence to become an independent researcher. The Institute offers PhD Programme in the following disciplines – Biological Sciences, Chemical Sciences, Earth Sciences, Mathematics & Statistics, Physical Sciences, Space Physics, Computer Science, and Humanities and Social Sciences.

6.2. General guideline for the award of PhD degree:

IISER Kolkata awards the degree of Doctor of Philosophy (PhD) to a student who has successfully completed the stipulated Programme of research.

The PhD Programme of research and its governing rules and regulations are formulated by the Academic Senate of the Institute. The Senate can modify or change the structure and the governing rules from time to time.

To be eligible for the PhD degree, a student must submit a thesis embodying the findings of her/his research carried out under this Programme.

The thesis should make original contributions of high quality, contributing to the advancement of knowledge, which will be judged by the experts in the relevant area.

The award of PhD degree shall be made upon the recommendation of the Senate.

The awarded degree will be “Doctor of Philosophy,” and the certificate will mention the title and year of the thesis.

6.3. Admission:

6.3.1 Protocol for student intake for PhD at IISER-K: The following points may be considered while choosing candidates for PhD at IISER-K:

- DoAA/ADoAA will inquire from the HoDs for requirement for PhD students in the respective departments
- The required information will reach DoAA/ADoAA through the departmental PGAC Conveners/HoDs.
- DoAA/ADoAA will request DoSA /Chief Warden to report on the availability of seats in hostels.
- DoAA/ADoAA will inform about the possible quantity of intake for the PhD Programme to the HoDs as approved by the Director through the PGAC members.

6.3.2 Channels of Admission

i. Regular Channel:

Selection to the PhD Programme is made twice a year - between May and July (for the Autumn Semester beginning in August) and between November and December (for the Spring Semester beginning in January). The PhD admission process is coordinated by the Post Graduate Academic Committee (PGAC) comprising of one faculty member from each department of IISER Kolkata with the support of the Academic Cell and the IT Cell.

Advertisements are issued in the Institute website in February/March for the Autumn Semester and in August/September for the Spring Semester. Applications are accepted online through an application

portal and all relevant information, including the selection list is published in the Institute website on pre-defined dates.

Interviews are conducted by interview boards duly constituted by the respective departments in March/April/May for the Autumn Semester and in October/November for the Spring Semester.

The PGAC would provide all documents pertaining to the PhD admission to the Academic Cell for future records and reference.

ii. **PhD students joining from other Institutes:**

If a student of another Institute/University wants to move to IISER Kolkata, he/she has to qualify through the regular admission process. Transfer of fellowship will be the responsibility of the candidate, the supervisor and the PGAC. The student will have to do all regular course-work, appear for the Comprehensive Examination and the Graduate Seminar, and, therefore, fulfil all the requirements of the PhD degree in the Institute of a regular applicant. In principle, this will be a fresh PhD admission, albeit of a shorter duration depending on the availability of the external fellowship.

iii. **Students working in sponsored projects:**

Students working in sponsored projects in the Institute (as project JRF or equivalent position) are not entitled to join the PhD Programme automatically.

Project JRF student can enter the main PhD Programme of the Institute only if

- a) The student has qualified in at least one National level examination.
 - b) The student goes through the rigorous PhD selection interviews.
 - c) After the duration of the project unless the student earns his own fellowship, the supervisor will arrange for fellowship from his/her ARF or from other sources including other project(s).
 - d) The student and the Supervisor sign a declaration agreeing to the condition mentioned above.
- iv. Students can be admitted under institute funding but the number of Institute-funded PhD students of the Department at any point of time cannot exceed the number of faculty members in the department.
- v. **Part-time PhD:** New PhD students are not allowed to work part-time. If a regular PhD scholar, who has worked at least three years at IISER Kolkata, gets a government job and wishes to leave full-time PhD work, he/she may be allowed to complete the work as a part-time PhD student without any fellowship and upon recommendation of the concerned supervisor(s). Such a student needs to present progress report to the RPC every year following the normal PhD norms of the Institute. The upper limit of the total PhD tenure for these candidates will also be 8 years (up to submission of the thesis).
- vi. **Students of newly joining faculty members from other universities / institutes:**
If a faculty member of another Institute joins IISER-K, his/her existing students may be admitted as per the following rules.
- (a) If a student had joined the faculty member within the past three months, the student will have to give fresh interview at IISER-K.
 - (b) A relatively older student (who joined the lab in more than four months ago) will present his/her work at IISER-K in front of a committee comprising the PGAC and the Head of the department where the faculty member has joined. This committee will interview the student before admission.
 - (c) The committee will also review the coursework already done by the student in the previous Institute. In case of dissatisfaction, the Committee will recommend fresh course work at IISER-K.

- vii. **Foreign nationals:** Foreign nationals will be admitted to the PhD Programme directly through the Institute's admission portal. The fees structure will be the same as that currently applicable to Indian PhD students. A fraction of those admitted through the "Study in India" Programme of MHRD may enjoy tuition fee waiver as per MHRD norms. The admitted students will be given accommodation in Institute hostels and the PhD students will receive a monthly fellowship at par with IISER Kolkata Institute fellowship.

6.3.3 Minimum Eligibility Criteria

- i. For students with own fellowship: Students with independent PhD fellowship from external funding agencies (e.g. CSIR, UGC, DBT, ICMR, INSPIRE, NBHM, etc.) and having a minimum of 55% marks in their Master's degree are eligible to apply for the IISER Kolkata PhD Programme. Industry-supported candidates may be considered as 'self-funded' and may be selected, provided they apply and get selected through the regular admission process of the PhD Programme. Initially INSPIRE fellows will be given provisional admission, confirmation of which is subject to receiving a final award letter from the INSPIRE. The concerned supervisors should ensure quality of research proposals which their PhD students submit to INSPIRE for fellowship activation.
- ii. For students without any fellowship: The areas in which Institute-funded PhD students will be taken will be announced in the PhD advertisement. An applicant must have qualified at least one national level exam, e.g. GATE, JGEEBILS, JEST etc. (the cut off score will be mentioned in the advertisement) and must have a minimum of 55% marks in the Master's degree.
- iii. Students will also be admitted based on merit, for PhD, inter-alia, from students with CGPA of 8 and above (on scale of 10) in BS-MS, based on evaluation of projects submitted by them and such PhD students may be granted Assistantship in line with assistantship granted to B. Tech graduates from the IITs. (This is as per recommendation of the Council of NITSER vide Item No. 11.5 of its 11th meeting held on 18.07.2018.). The students need to express in writing to the respective departments by their 10th semester of the BS-MS Programme about their decision to join IISER-K. The shortlisted candidates need to appear for an interview conducted by the department along with the new candidates and the list of selected candidates upon the approval of the Director can be offered for admission. Discontinuity in their education is not permitted. Unless these students have an external fellowship, they can be considered as institute funded fellow and their number is limited by the maximum number of institute funded students of the department (see section 5.3.2 (iv))
- iv. The minimum eligibility criteria mentioned above may change time to time upon recommendation by the Senate.
- v. Fulfilling the minimum eligibility criteria does not ensure that a candidate will be called for the interview. Additional criteria might be set by the departments based on academic records, experience and research interest of the candidates.
- vi. Relaxation for SC/ST & OBC candidates will be as per prescribed Government of India norms.

6.4 PhD Registration:

- i. The selected candidates are required to complete the online pre-registration process after paying the requisite fees through online transaction (the pre-registration period and the current fee structure can be found on the Institute website). After the pre-registration and deposition of fees, a PhD student will be formally registered on the date of his/her joining by filling up the required registration form. However, until the verification of the documents is done by comparing with the originals, the registration will be considered to be 'provisional'.
- ii. A department may choose to offer PhD position to the wait-listed candidates once the pre-registration deadline is over for the first listed candidates.
- iii. Students waiting for their final Masters Degree result may be provisionally selected for PhD Programme but they must furnish the final result (mark-sheet) satisfying the qualification criteria within 30 days from the date of admission. Scholarship will not be given to the provisionally admitted students until the production of the final result. After the production of the final result, the fellowships for the preceding months will be released with a retroactive effect. If a provisionally admitted student fails to meet the eligibility criteria in his/her final results, admission to IISER Kolkata will stand cancelled.
- iv. Copies of joining report and attested forms of the new batch of externally-funded PhD students are to be submitted through the thesis supervisor, to the Academic Cell within two weeks of their joining IISER Kolkata.
- v. The PhD Programme tenure at IISER Kolkata will be of 5 years. Any further extension without any fellowship (maximum upto 8 years) will be at the discretion of the competent authority. PhD students can continue getting fellowship from other external agencies if such funding is available to their supervisors.

6.5 PhD Orientation and signing of ethics and safety declarations:

Each department conducts an orientation for the fresh batch of PhD students, normally within two working days of PhD registration. During the orientation, the concerned HoD welcomes the students and introduces them to the departmental PGAC Convener. The students are briefed about the department's activities, course choices, research ethics and about general PhD rules. Students have to sign a declaration pertaining to research ethics and safety and submit to their respective departmental office. Any other general queries of the students are also addressed during the orientation.

6.6 Appointment of PhD Supervisor:

6.6.1 Generally, a supervisor will be assigned to a student by the PGAC immediately or within two weeks from the date of admission through mutual consent. Any regular faculty member of the institute can supervise a PhD student. The departmental PGAC should send all the records related to supervisor allotment to the Academic Cell within three months from the start of the semester.

6.6.2 Interdisciplinary work: A student may join, with permission from the Heads of both the departments, a regular faculty from a department other than the student's parent department. In that case, he/she is assigned a Programme Advisor from his/her parent department. In addition, the student will have to fulfill a part of the PhD coursework requirement (including the Comprehensive Examination and Graduate Seminar) of the parent department. Specifically, he/she will have to take a minimum of two courses (out of the total number of courses required for PhD coursework) from both departments which will be monitored by the Programme Advisor. His/her PhD degree will be awarded from his/her parent department.

6.6.3 Supervision by faculty members on contract: Faculty members on contract may also supervise a PhD student provided a regular faculty member from the same department is allotted as co-supervisor, with the understanding that the co-supervisor will supervise the PhD student in the absence of the faculty member on contract. In case co-supervisor leaves the Institute, the faculty member on contract may continue as supervisor, and the department will have to allot another co-supervisor.

6.6.4 Co-supervisor from another Institute/University: Faculty members of IISER Kolkata can act both as co-supervisor for students and choose co-supervisors from other institutes. In order to induct a faculty member of another Institute as a co-supervisor, the supervisor has to submit a request to the ADoAA, forwarded by the HoD and PGAC Convener, along with a written consent from the concerned external faculty. Upon receiving the ADoAA's approval, intimation has to be sent to the DoFA office. If a student is externally funded then this information should also be communicated to the funding agency.

6.6.5 Change of PhD Supervisor:

- i. Change of supervisor is generally discouraged and is permitted only under very special circumstances. This will be decided by the DoAA/ADoAA on the recommendation of the HoD and Departmental PGAC convener after obtaining the consent of (i) the student, (ii) the present Supervisor(s) and (iii) the proposed Supervisor(s). For self-funded candidates, rules of the respective funding agency will be followed.
- ii. If the supervisor(s) leave/s the Institute permanently or goes on leave for a period of more than six months, the Departmental PGAC convener and HoD shall provide a co-supervisor in consultation with the supervisor and the student. The supervisor should officially intimate the HoD and the PGAC Convener, and should initiate the process of allotment of new Supervisor/Co-Supervisor for all of his/her students. No-dues clearance for the supervisor from the concerned department should be issued only after this process is completed.
- iii. If a supervisor goes on leave for a period of less than six months but more than two weeks, HoD may appoint a supervisor in-charge in consultation with the supervisor for that period.
- iv. In case the thesis supervisor leaves the institute on deputation or on lien, an Administrative Guide or a Programme Advisor will be suggested by the supervisor and approved by the Institute, through the HoD, to help the student in administrative formalities.

6.7 PhD Course Work:

- i. PhD students of IISER Kolkata must undergo rigorous PhD course work. The purpose of the coursework is not just to prepare the student for the research he/she is going to conduct, but also to enable the student to acquire a comprehensive understanding of the overall discipline, which is needed for a fruitful career in teaching and independent research.
- ii. A student must register for the courses online before the semester starts, avoiding any clash in the Time Table.
- iii. Each department may fix its own minimum number of credits; however it should not be less than 16 credits. This minimum number of credits set by a department has to be earned within the first year by a PhD student of the respective department to get the PhD degree. Only under exceptional circumstances, the coursework may spill into the 3rd semester, with permission from the DoAA.

Name of the Department	Minimum nos. of credits required for PhD coursework
Department of Biological Sciences	16
Department of Chemical Sciences	16
Department of Earth Sciences	16
Department of Mathematics & Statistics	24
Department of Physical Sciences	24
CESSI	24
Department of Humanities and Social Sciences	16

- iv. The courses to be taken by the PhD students are decided by the respective departments in consultation with the supervisor. The coursework should include one course on Research Methodology (of 4 credits).
- v. The student should consult the PhD supervisor (or the departmental PGAC convener if the PhD supervisor is not assigned) before choosing the courses.
- vi. On approval of the departmental PGAC a student may take a PhD level course offered by another department as long as they meet the prerequisites (if any). Out of the total number of courses, at most two can be taken from other departments.
- vii. For IPhD students all the PhD courses will be waived except the Research Methodology course (if not done during IPhD course work). If a BS-MS student of IISER Kolkata joins the PhD Programme, the coursework may be partially/fully waived upon recommendation from the RPC / PGAC.
- viii. For the successful completion of the PhD course work, a student must get grade 'C' or above in each of the courses taken. It is mandatory to complete the PhD coursework to continue in the PhD Programme.
- ix. In case a student is unable to secure grade 'C' in a course, s/he will be allowed to sit for a supplementary examination for that course, or to choose another course. If the student fails in the new course as well, s/he will be allowed one last attempt for supplementary examination. PhD students who fail in coursework will be allowed to complete the required number of credits within the first 3 semesters of joining.
- x. The Academic Cell will keep track of the students who cannot secure a minimum of Grade C and will initiate the process of termination of their studentship.

6.8 Review of Progress:

6.8.1 Research Progress Committee (RPC): A 3-Member Research Progress Committee (RPC) will be constituted for all research scholars. The committee will comprise the Supervisor, and two other faculty members from any department (nominated by the supervisor). External faculty members may also be invited to join, depending upon requirements. The RPC will monitor and identify problems faced by students, if any, at an early stage. Students will have to submit a Progress Report and will have to

present a talk in front of the RPC once a year. SRF up-gradation interview, as well as pre-submission open seminars, can be initiated only on recommendation of the concerned RPC and PGAC. The submission of a thesis should be approved by the RPC on the basis of a pre-submission open seminar.

6.8.2 Annual report: Every PhD student is required to prepare and submit an Annual Progress Report to the RPC. After the RPC meeting, if the progress report is approved, it has to be communicated to the Academic Cell. The externally-funded students should send the annual progress report to the funding agency and should also submit a copy to the Academic Cell for the record.

6.8.3 Annual review by the RPC: A student has to give a talk every year before the RPC summarizing his/her progress, and the RPC is expected to advise him or her and recommend critical steps.

- i. At the end of the 1st year, a student is supposed to have (a) completed the coursework, (b) identified the problem (can articulate the questions he/she is asking), and (c) done some literature survey to learn what is already known on that topic.
- ii. At the end of the second year, a student is supposed to have completed the above items that may have remained incomplete after the 1st year. In addition, by this time the literature survey must be thorough, he/she must identify the methodology to be followed, and should be able to do at least one piece of work that is either communicated or is ready for communication. If these conditions are satisfied, the RPC recommends conduction of the JRF to SRF up-gradation exercise. Otherwise it may be deferred by a few months.
- iii. At the end of the 3rd and 4th years the student should present the incremental work done in the preceding year, and the papers published. By the middle of the 5th year the student should be in a position to write his/her thesis. The RPC meeting should be conducted at this stage. Finally, a last meeting of the RPC recommends conduction of the pre-submission open seminar and submission of the thesis.
- iv. The timing of the RPC meetings is not hard and fast. The supervisor may decide convenient timings. For example, the RPC meeting after the 2nd year may be scheduled after the student has completed one piece of work, so that the same RPC meeting can recommend the conduction of the SRF up-gradation exercise. The meeting after the 4th year may be scheduled when the student is ready to write his/her thesis.

6.8.4 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 in the respective department of the Institute.

Comprehensive examination for PhD students will be conducted by the respective RPCs. It should normally be conducted within one month from the completion of coursework.

6.9 Fellowship and Tenure:

- i. For students with independent fellowship the amount of fellowship/contingency and tenure will be as per the norms and conditions of the concerned funding agency. Such students must initiate the process of fellowship activation immediately after joining and must submit copies of relevant forms to the Academic Cell for records.
- ii. For Institute-funded PhD students the fellowship amount will be as per MHRD norms. The fellowship tenure of Institute-funded fellows will be five years.

6.10 Contingency grant:

- i. For students with independent fellowship the amount and duration of contingency fund will be as per the norms and conditions of the concerned funding agency.
- ii. Contingency fund will not be available for students funded by IISER Kolkata.

6.11 JRF to SRF upgradation:

- i. A student should normally spend two years at the JRF level and will be upgraded to SRF level subject to fulfilment of certain criteria.
- ii. If the supervisor feels that the progress has been satisfactory, he/she will convene a meeting of the RPC at the end of the 2nd year. The RPC should check if the student has done a thorough literature survey, has decided the methodology to be followed, and has done at least one piece of work that is either communicated or ready for communication. If these requirements are satisfied, the RPC will recommend the conduction of the up-gradation exercise.
- iii. The department will arrange an upgradation interview for the student. The progress of the student would be evaluated by a selection committee comprising the PhD supervisor, the Joint/Co-Supervisor, the PGAC Convener/nominee and an External Expert (of the rank Associate Professor and above) from an academic institution. For externally funded students the constitution of the selection committee will be as per the requirement of the funding agency. The external expert will be paid an honorarium of Rs. 2000/- along with TA (for local travel) and hospitality by the department.
- iv. SRF up-gradation will be effective after 2 years of JRF or from the date of evaluation, whichever is later. For externally funded students, the fellowship terms and conditions at the SRF level will be as per the norms and conditions of the concerned funding agency.

6.12 Extension of tenure: In some cases, if a PhD student is unable to complete the requirements of the degree within the stipulated time of 5 years, the DoAA, on recommendation of the RPC, may approve extension of his/her, on a case to case basis.

6.13 PhD Thesis Submission:

6.13.1 Before submission:

- i. All students will have to carry out their major research in the Institute for at least a period of two years and six months from the date of PhD registration before the submission of the thesis.
- ii. When the supervisor feels that the thesis is ready for submission, he/she will convene a meeting of the RPC. If the RPC is convinced that the work done is sufficient for submission of the thesis, it will recommend conduction of the pre-submission open seminar.
- iii. Pre-submission open seminar can be organized by the PGAC only on recommendation of the concerned RPC. Upon satisfactory performance of a student in the pre-submission presentation, the PGAC will recommend submission of PhD thesis within three months. In case the student is unable to submit the thesis within this period due to unforeseen circumstances, an extension may be sought from the ADoAA.
- iv. The thesis must be passed through a plagiarism check software (such as 'Turnitin') and the student must ensure that, apart from quotations, no part of the thesis is copied from any published material other than the student's own papers.

- v. Submission of at least one paper before the submission of his/her thesis is a must. However, it is recommended that every research fellow should have a paper accepted for publication in a peer-reviewed journal before submission of the thesis.

6.13.2 Thesis submission for evaluation:

- i. The thesis (2 spiral bound copies + the electronic version) should be submitted to the HoD. A synopsis of the PhD thesis should also be submitted. It should be less than 10 page typed in Times New Roman 12 font, 1.5 line spacing. The HoD will then forward the thesis and the synopsis to the Academic Cell with a request to initiate the process of evaluation.
- ii. The Panel Form for reviewers' names suggested by the supervisor (and forwarded by the HoD) should also be submitted in a sealed envelope. The panel of reviewers should have a minimum of 8 names and a maximum of 12 (at the level of Professor or Associate Professor) and if the supervisor has already taken consent from the external reviewers then it can be 6 (2 with Indian affiliation and 4 with international affiliation). Care should be taken to avoid any conflict of interest. Research collaborators of the student or the supervisor should not be suggested as examiner of the thesis.

6.14 Evaluation of the PhD Thesis:

- i. The thesis will be evaluated by four independent reviewers – one from India, two from abroad and the supervisor(s).
- ii. The order of preference of the suggested reviewers will be chosen by the ADoAA. The Assistant Registrar (Academic) will seek consent of the suggested reviewers to evaluate the thesis in the order of preference, by sending them the synopsis. If any of the suggested examiners refuses to act as a reviewer or does not respond within 7 days, the next preferred reviewer from the same panel will be contacted.
- iii. On receipt of consent, the Assistant Registrar (Academic) will send the thesis to two foreign reviewers and one Indian reviewer for evaluation.
- iv. For evaluation of PhD thesis, an honorarium as per norms will be paid to the Indian and the foreign experts. (Presently for Indian expert it is Rs. 10000/- per person whereas for foreign expert it is USD 200/- per person, this amount may vary from time to time.)
- v. The reviewers will be requested to submit their evaluation report (in the prescribed format) within 6 weeks from the date of receipt of the thesis (scanned as well as a signed hard copy). The PhD supervisor will also be formally asked to submit her/his report within the stipulated time.
- vi. If a reviewer is unable to send the report within the stipulated time of 6 weeks, reminders will be sent by the Assistant Registrar (Academic). If the reviewer does not respond in spite of repeated reminders, the ADoAA may advise the thesis for evaluation to the next preferred reviewer from the panel. Under exceptional circumstances the ADoAA may approve review by two external examiners from within India.
- vii. However, if one of the two review reports from foreign reviewers is not received within the stipulated time, the ADoAA may take a decision based on the available review reports (from one Indian reviewer and one foreign reviewer and the PhD supervisor).
- viii. The reviewers should be specifically requested for a critical evaluation of the quality and the quantity of the research work embodied in the thesis. The reviewer has to select one of the following statements in the Evaluation Report (with space for additional comments overleaf):

- (a) The thesis is recommended for the award of the degree without any correction.
 - (b) The thesis is recommended for the award of the degree provided the following points (as listed overleaf) are clarified during Viva-Voce.
 - (c) The thesis is recommended for the award of the degree with minor revision (as listed overleaf/in the thesis)
 - (d) Substantial revisions involving rewriting of one or more chapters are necessary (mentioned in detail overleaf) without, however, doing any further research work.
 - (e) The thesis is not acceptable in the present form and needs to be rewritten. However, it reveals sufficient quality and quantity of work to warrant the student being given an opportunity for further research work and/or re-interpretation of results (see overleaf for details).
 - (f) The thesis is not recommended.
- ix. Upon receiving the reports, the DoAA/ADoAA will classify the reports into one of the following four categories:
- (a) Category 1 (the thesis be accepted without any correction).
 - (b) Category 2 (thesis be accepted with minor revision).
 - (c) Category 3 (major revision is suggested, resending the thesis (after correction) to the concerned reviewer(s)).
 - (d) Category 4 (a complete rejection).
- x. Depending on the reports of the reviewers, the DoAA/ADoAA will decide whether the thesis can be accepted for viva voce or be rejected or be referred to a new reviewer. If one of the external reviewers recommends rejection, then an adjudicator from the same panel may be appointed.
- xi. Copies of the reports will be made available to the PhD supervisor(s) of the student concerned within a week of the receipt of the reviewers' reports, after classification of the same by DoAA/ADoAA.
- xii. The supervisor must ensure that all the corrections including modifications/revisions suggested by the external reviewers have been incorporated by the student.
- (a) If the report is classified as Category 1 or 2, the revised thesis must be submitted to the ADoAA within 15 days;
 - (b) If the report is classified as Category 3, the revised thesis must reach the ADoAA within three months. However, the ADoAA can extend the deadline of submission upon request.
- i. A thesis, if rejected, may be resubmitted once only after revision, not earlier than 1 year and not later than 2 years from the date of such intimation to the student by the ADoAA. The thesis so resubmitted may be examined by the same reviewers or by new reviewers (as the ADoAA decides). The procedure after receiving the new reports should be the same as above.
 - ii. Rejection even after resubmission will disqualify the student from further consideration for the award of the PhD degree in the topic chosen.

6.15 Final Viva Voce:

- i. For categories 1 and 2 above, the PGAC will organize his/her final viva voce (in form of an open seminar), with intimation to the Academic Cell at least 10 working days in advance.
- ii. The Academic Cell will send out a formal invitation to the Indian reviewer of the PhD thesis, who is expected to conduct the viva voce in the presence of RPC members and the PGAC convener.
- iii. In cases where the Indian examiner cannot physically attend the final viva voce of a student, the presentation may be arranged through video calling so that the examiner can participate and evaluate the thesis defence. This will be done only under exceptional circumstances.
- iv. The final report of the viva voce signed by the supervisor, the external examiner, the HoD along with the final copies of thesis (2 hardbound + the electronic version) are to be submitted within 7 working days from the date of viva voce to the ADoAA, who will place it in the subsequent Senate meeting for approval of the award of the PhD degree.
- v. The external examiner shall be entitled to an honorarium of Rs 5,000/-. In addition her/his travel (economy class airfare) and local hospitality will be covered by the institute as per standard norm.

6.16 Award of PhD Degree:

On receipt of the approval of the Senate, the PhD degree may be conferred in the next convocation. Upon request of the student, a provisional certificate may be issued by the ADoAA based on the final report of the viva voce provided the student has obtained the 'No Dues' clearance.

6.17 Leave Rules:

6.17.1 The leave sanctioning authority for PhD students will be the Associate Dean of Academic Affairs (ADoAA). All applications should be routed through the respective supervisor, PGAC convener and the HoD.

The PhD students receiving fellowships from the external funding agency will require permission from the respective funding agency as well as the ADoAA, for any long leave exceeding 30 days.

The PhD students are entitled for the following categories of leave:

6.17.2 Ordinary Leave:

- i. A PhD student is eligible for 30 days leave with fellowship for each completed year from the date of his/her joining. This includes medical leave. Saturdays, Sundays and holidays during the leave period are counted towards leave, except for prefixed or suffixed holidays. The leave will be treated as part of the student's tenure.
- ii. For IISER-K fellowship holders the ADoAA can sanction leave without fellowship under exceptional circumstances. For students funded by external funding agencies, approval from the concerned funding agency is mandatory.
- iii. In case a student proceeds on leave before termination of Fellowship, he/she must join back before the expiry of tenure; failing which the tenure will be deemed to have terminated with effect from the date he/she proceeded on leave. A joining report should be communicated to the ADoAA, in case of leave for more than seven days.

6.17.3 Academic Leave:

- i. PhD students may be allowed to attend Seminars / Conferences / Workshops / Training / Short-term courses etc. The duration of the leave will be decided based on the recommendation of the supervisor.
- ii. Any visit outside the country to attend Seminars/Conferences/Workshops/ Training/ Short-term courses etc. must be intimated to the external funding agencies well in advance.
- iii. The fieldwork such as data collection, survey work / going to laboratories of other Institutes for use of instruments will be treated as 'on duty leave'.

6.17.4 Maternity/Paternity Leave:

- i. Women students with less than two surviving children are entitled to full fellowship plus HRA (if applicable) during the period of absence up to 180 days on the grounds of maternity. The fellowship amount for leave period will be paid after the student resumes duty and submits a medical certificate in support of actual confinement. It is expected that the student will make up any deficiency in research progress during the remaining part of the tenure.
- ii. Male students with less than two surviving children are entitled to 15 days of paternity leave during the confinement of his wife on submission of relevant documentary proof.

6.18 Conduct and Discipline:

Rules and regulations for conduct and discipline are common to all students of IISER Kolkata and will be informed to the PhD students at the time of their joining in form of an undertaking (Institute by-laws). Failure to abide by these rules will lead to disciplinary action.

Unauthorized absence for more than a month, as communicated by the concerned supervisor/department through monthly attendance sheets, may lead to a reduction of the fellowship amount, suspension, or termination.

6.19 Termination of Studentship:

The PhD studentship is liable to be terminated in the following events –

- i. Giving false information at the time of application / admission / registration
- ii. Failure to complete the course work requirement
- iii. Not conforming to the regulations of the Programme
- iv. Consistent lack of progress in research
- v. Involved in any form of academic misconduct, e.g., plagiarism/data fabrication
- vi. Violation of conduct and discipline rules of the Institute
- vii. Not submitting the thesis within the stipulated period
- viii. Not enrolling for a semester within stipulated dates

Note: The Senate may make further amendments to the Rules and Regulations, if required. The amendment and the revised Rules and Regulations will be reflected in the revised Guidelines.

The PhD Rules and Regulations will be automatically applicable to the Integrated PhD students from third year onwards.

6.20 Final Thesis:

6.20.1 Two copies of hard bound thesis and an electronic version should be submitted to the Academic Cell within 7 days of the Viva Voce.

6.20.2 The thesis must be passed through ‘Turnitin’/other reputed software for plagiarism check and the student must ensure that, apart from quotations, no part of the thesis is copied from any published material other than the student’s own papers.

6.20.3 Format:

- i. Page Size: A4/Back to Back
- ii. Binding: Spiral binding at the time of submission, hard bound after the time of defence
- iii. Cover:
 - (a) Colour: Black
 - (b) The top should have title of the thesis, the name of the student, the year of completion and the Institute’s name
 - (c) The backbone should have the title of the thesis, the student’s name, and the year of completion.
- iv. Font type and Size: Times New Roman, 12 Pts. or any other equivalent font size.
- v. Line Spacing: 1.5
- vi. The front page should have the following information with centre alignment:
 - (a) Title of the Thesis
 - (b) Name of the degree
 - (c) Name of the student
 - (d) Roll No. of the student
 - (e) Name of the Supervisor
 - (f) Name of the Co-Supervisor if any
 - (g) Name of the Department
 - (h) Name of the Institute with its Logo
 - (i) Month, Year
- vii. Declaration of the student with his/her signature on academic integrity and copyright (template given below)
- viii. Certificate of the Supervisor with his signature (template given below)
- ix. Acknowledgement (not more than two pages)
- x. Dedication (optional)
- xi. Abstract
- xii. Chapters, starting with ‘Introduction’ and ending with ‘Conclusion’
- xiii. References
- xiv. The electronic version should have the following information:
 - (a) Name and Roll No. of the student
 - (b) Title of the Thesis
 - (c) Month, Year

6.20.4 Template of Declaration by the student

Declaration by the student

Date: _____

I, Mr./Ms. _____ Registration No. _____ dated _____, a student of the Department of _____ of the Integrated PhD Programme/ PhD Programme of IISER Kolkata, hereby declare that this thesis is my own work and, to the best of my knowledge, it neither contains materials previously published or written by any other person, nor has it been submitted for any degree/diploma or any other academic award anywhere before. I have used the originality checking service to prevent inappropriate copying.

I also declare that all copyrighted material incorporated into this thesis is in compliance with the Indian Copyright Act, 1957 (amended in 2012) and that I have received written permission from the copyright owners for my use of their work.

I hereby grant permission to IISER Kolkata to store the thesis in a database which can be accessed by others.

Signature

Name

Department of _____

Indian Institute of Science Education and Research Kolkata

Mohanpur 741246, West Bengal, India

6.20.5 Template of Certificate from the Supervisor

Certificate from the Supervisor

Date: _____

This is to certify that the thesis entitled “_____” submitted by Mr./Ms. _____ Registration No. _____ dated _____, a student of the Department of _____ of the Integrated PhD Programme/ PhD Programme of IISER Kolkata, is based upon his/her own research work under my supervision. This is also to certify that neither the thesis nor any part of it has been submitted for any degree/diploma or any other academic award anywhere before. In my opinion, the thesis fulfils the requirement for the award of the degree of Doctor of Philosophy.

Signature

Name

Professor/Associate Professor/Assistant Professor

Department of _____

Indian Institute of Science Education and Research Kolkata

Mohanpur 741246, West Bengal, India

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