

# Indian Institute of Science Education and Research Berhampur

Integrated Ph.D. (iPhD)
Programme Manual
Guidelines and Regulations (2020)

#### 1. GENERAL INTRODUCTION

The Indian Institutes of Science Education and Research (IISERs) were established in 2006 through a proclamation of the erstwhile Ministry of Human Resource Development (MHRD), Government of India, to promote quality education and research in basic sciences. In the first go, two IISERs were started one at Pune and another at Kolkata. The establishment of other IISERs followed: at Mohali in 2007, at Bhopal and Thiruvananthapuram in 2008, and at Tirupati in 2015. IISER Berhampur is the youngest one, established in 2016.

Subsequently, these Institutes were brought within the ambit of an Act of the Parliament (*NITs Amendment Act-2012*, no. 28 of 2012) promulgated with the assent of the President of India on June 7, 2012 (vide Gazette Notification no. 13, dated June 8, 2012). Now, each IISER is a degree granting autonomous institution with a focus on integrating science education and research.

The IISER Berhampur is the seventh Centre of Excellence in the family of IISER institutions, and it is dedicated to teaching and research in basic sciences. As a unique initiative in science education in India, IISER Berhampur aims to be a University of the highest caliber devoted to both high quality teaching and state-of-the-art research in a totally integrated manner, thus nurturing both curiosity and creativity.

IISER Berhampur initiated a 5-year BS-MS programme in the year 2016, and then PhD programme in the next year, aiming to create an intellectually vibrant atmosphere of research. In August 2020, the institute decided to start an Integrated Ph.D. (iPh.D.) programme to attract intellectually motivated B.Sc., graduates into academia and train them for scientific research.

Apart from classroom instruction, IISER Berhampur builds student skills in areas such as scientific enquiry, problem solving, analytical and communication skills, computational sciences, electronics, instrumentation and workshop practices. IISER Berhampur has developed advanced teaching and research laboratories, where students will have the opportunity to perform experiments as well as pursue advanced research under the mentorship of world-class faculty. This aims at making education and career building in basic sciences exciting and rewarding. The faculty at IISER Berhampur dedicate themselves to learn, teach and serve society through excellence in science education and research, in an ecosystem based on integrity, fairness, dignity and professionalism, aimed to provide equal opportunities for all.

This document provides an overview of academic affairs and the guidelines/regulations pertaining to the Integrated Ph.D. (**iPhD**) programme offered by IISER Berhampur. Besides these general guidelines, individual departments impose additional requirements from time to time, as approved by the Senate of the Institute, in order to achieve their set goals.

#### **1.1 About the Programme**

iPhD is a seven-year programme that merges a Master degree (MS) and a Doctoral degree (PhD). Students are admitted after their graduation (B.Sc. or equivalent). The programme has two phases: (a) **MS phase** (the first two years), and (b) **Ph.D. phase** (the third-year onwards until the completion of doctoral dissertation). The MS phase includes coursework and small research/reading project(s). The Ph.D. phase will have the doctoral dissertation. After the MS phase, the students will be examined by a committee through a **Comprehensive Examination**. After successfully clearing this examination, they will be moved to the Ph.D. phase. Students enrolled in the iPhD programme are supported by institutional/external fellowship.

#### 2. ADMINISTRATIVE BODIES

#### 2.1 The Senate

The Senate is the principal academic body of the Institute and it shall have control over the general regulation of academic affairs. The Senate is responsible for maintaining the standards of education, teaching and training, inter-departmental co-ordination, and for considering and recommending the examination results and award of degrees for the approval of the Board of Governors (BoG) of the Institute. The Senate shall exercise other powers and perform other duties as may be conferred or imposed upon it by the Statutes.

#### 2.2 The Office of Academic Affairs

The Office of Academic Affairs, headed by the Dean, Academic Affairs (DoAA), is responsible for implementing the decisions taken by the Senate and each Departmental Post-Graduate Committees (DPGCs). Its activities include:

- Receiving, processing and maintaining all records related to admissions to various programmes, semester registrations, leaves, grades, scheduling of courses and examinations and award of degrees/prizes.
- Periodically releasing course contents, manuals for various programmes, and the academic calendar, duly approved by the Senate.
- Conduct of Convocation.
- Disseminating information pertaining to all academic matters to students and faculty.
- Issuing necessary memoranda/orders.
- Acting as a channel of communication between students, instructors, departments, and DPGCs.

#### 2.3 The Institute Academic Affairs Committee (IAAC)

This committee consists of the chairpersons and conveners of DPGC of each department and is headed by the Dean, Academic Affairs. This standing committee examines and recommends suitable remedial measures for academic issues common to all students, including those to be taken to the Senate for consideration.

#### 2.4 The Department Post-Graduate Committee (DPGC)

As the iPhD programme has both MS coursework component and a post-graduate dissertation component, the programme is overseen by DPGC. This committee consists of a Convener (nominated by the Head of the Department), the Head of the Department (HoD), and 2-4 faculty members. The tenure of DPGC shall be for two years, with half of the members retiring every year. At the end of the first year, lots will be drawn for all the committee members (other than the HoD), to decide on the retiring members. The constitution of the DPGC shall be reported to the Office of Academic Affairs as and when there are amendments in the same. The Dean of Academic Affairs and the Director will give the final approval for the constitution of the committee and/or any amendment therein.

#### **Functions of the DPGC:**

- To advise students in their academic programmes and provide appropriate guidance to maintain the required individual academic standing (minimum credits and CPI requirements to complete the academic programme).
- To make recommendations to the DoAA in all matters pertaining to academics, including the introduction of new courses, credits allotted to them, and approval of their contents.
- To recommend modifications, as appropriate, for courses already approved by the Senate.
- To oversee various matters related to the PhD programme and the Ph.D. phase of the iPhD programme as mentioned in the Ph.D. and iPhD manuals.

Notwithstanding any of the above, the Senate retains powers to final review the guidelines/policies recommended by each DPGC and such matters as may be brought in appeal before it. In discharging her/his responsibilities, the Dean, Academic Affairs shall make full use of the appraisals and the recommendations of the DPGCs.

#### 2.5 Advisory role of DPGC

Each iPhD student is counselled by the DPGC for the first two years of the programme. The DPGC is expected to:

- Develop a mentoring relationship with the advisee that is collaborative in nature, and where each advisee feels a sense of connection, support and guidance.
- Guide the students about the rules and regulations governing the programme.

- Provide guidance about the courses to be taken in various semesters.
   Pay special attention towards students struggling with academic performance.
   ADMISSIONS

### 3.1 Eligibility:

Discipline	Basic Eligibility Criteria	Additional Eligibility Criteria
Biological Sciences	Students with minimum 60% marks in aggregate (overall percentage with all subjects where an Honours system is not applicable) in Bachelor's or any equivalent degree.	Valid JGEEBILS/ JAM (BL - Biological Sciences or BT - Biotechnology)
	or	
	Students with 60% marks in the Honours/major subject in aggregate (where such a system is applicable) in Bachelor's or any equivalent degree.	
	Subject area: Biological Sciences (All areas) /Environmental Sciences/ Mathematics/ Chemistry /Physics / Medical Sciences / Engineering. If the scoring system follows a CGPI, the minimum score should be 6.0 on a 10-point scale.	
Chemical Sciences	Students with minimum 60% marks in aggregate (overall percentage with all subjects where an Honours system is not applicable) in Bachelors or equivalent degree.	Valid JAM (Chemistry)
	or	
	60% marks in the Honours/major subject in aggregate (where such a system is applicable) in Bachelors or equivalent degree.	
	Subject area: Chemistry (All areas) /Mathematics/ Biological Sciences /Physics / Medical Sciences / Earth and Environmental Sciences/ Environmental Chemistry/Pharmaceutical Chemistry. A candidate must have studied basic chemistry course(s) in their bachelor's degree.	
	If the scoring system follows a CGPI, the minimum score should be 6.0 on a 10-point scale.	
Mathematical Sciences	Students with minimum 60% marks in aggregate (overall percentage with all subjects where an Honours system is not applicable) in Bachelor's or equivalent degree.	Valid JAM (MA - Mathematics or MS- Mathematical Statistics)
	or	or
	60% marks in the Honours/major subject only in aggregate (where such a system is applicable) in Mathematics /Statistics/ Mathematical Sciences (All areas) or any equivalent degree.	Valid NBHM Ph.D. examination score.

	If the scoring system follows a CGPI, the minimum score should be 6.0 on a 10-point scale in B.A./B.Sc./B.E./B.Tech. or equivalent satisfying one of the above criteria.	
Physical Sciences	60% marks in aggregate (overall percentage with all subjects where an Honours system is not applicable) in Bachelor's or equivalent degree or	Valid JAM (Physics) or JEST (Physics)
	60% marks in the honours/major subject in aggregate (where such a system is applicable) in Bachelor's or equivalent degree  If the scoring system follows a CGPI, the minimum score	
	If the scoring system follows a CGPI, the minimum score should be 6.0 on a 10-point scale	

Note: The candidate MUST have qualified at least ONE of the above-mentioned additional eligibility criteria specific to each department. The scores/ranks must be valid at the time of admission. JAM/JGEBILS iPhD/JEST/NBHM (Ph.D.) scores/ranks of only the latest examination will be considered valid.

#### 3.2 Admission procedure

- a) Students are admitted to the programme once a year (the odd semester of an academic year; the August semester).
- b) Applications for iPhD programme are invited from suitable candidates through widely circulated advertisements on online and offline platforms.
- c) The application procedure is fully online.
- d) After receiving online applications, the departmental screening committees publish the names of the shortlisted candidates, who are called for the test/interview.
- e) Test/Interview call letters are sent to all shortlisted candidates.
- f) The final selection is based on the criteria set by the selection committee.
- g) A list of selected candidates is published on the Institute website and the selected candidates are sent offer letters.

#### 3.3 Physical fitness

All selected students will have to submit a medical examination report from a registered medical practitioner in a format prescribed at the time of admission.

#### 3.4 Admission for reserved categories

Reservation and relaxation of eligibility criteria for SC, ST, OBC-NCL, PD, and other categories will be as per the Government of India norms.

#### 3.5 Cancellation of Admission

The admissions of all students to their academic programmes are considered provisional until the submission of all required documents (duly verified copies) including mark-sheets, provisional certificates, reserved category certificates (if applicable), and/or other supporting documents of the qualifying examination. These documents should be submitted by the last date specified for this purpose in the

admission/declaration form. The Institute can cancel the admission of any student who fails to submit the required documents by the specified date or meet other stipulated requirement(s).

The Senate may also cancel the admission at any later stage if it is found that the student had submitted false information or suppressed relevant information while seeking admission. Further, the Institute has the right to cancel the admission of any student and terminate her/his academic programme at any stage on grounds of unsatisfactory academic performance, irregular attendance in classes, or acts of indiscipline.

#### 4. ACADEMIC SESSIONS

#### 4.1 The Semester System

#### 4.1.1 During the MS phase:

The academic session consists of two primary semesters, each spanning the duration of about 17 weeks and a summer semester:

- Semester I: From the first week of August to the last week of November.
- Semester II: From the first week of January to the last week of April.
- Summer Semester: From May to July.

Each semester (I and II) includes the following:

- Mid-Semester Examination
- End-Semester Examination

The duration of the mid/end-semester examinations is typically one week. It may, however, be extended, as required for the smooth conduct of examinations, by the Dean, Academic Affairs. The first day of the end-semester examination and the first class in a semester are preferably scheduled on a Monday.

A **summer semester** may include lab rotation / research projects / reading projects / courses etc. as guided by the Department specific manual. Departments may also offer senate-approved module courses.

#### 4.1.2 During Ph.D. phase:

Academic session in the Ph.D. phase consists of two primary semesters, each spanning six months:

- Semester I: From the first week of August to the last week of December.
- Semester II: From the first week of January to the last week of July.

#### 4.2 Academic Calendar

The schedule of all important events, such as registration, late registration, the commencement of classes, add/drop of courses, submission of documents, mid-semester examinations, mid-semester recess, academic pre-registration, end-semester examinations, submission of grades, and vacations during the academic session, are specified in the academic calendar displayed on the webpage of the Office of Academic Affairs. The academic calendar for every year (January to December) is released between September and October of the preceding year, duly approved by the Senate. Every student is expected to adhere to all the academic regulations of the programme and has an understanding of the requirement of the programme as given in the manual. The rules and regulations of the academic programme are subject to periodic revision.

#### 5. CURRICULUM

The iPhD programme consists of MS courses in the first two years, followed by compulsory Ph.D. courses in the subsequent years. Various courses are offered as department-compulsory, department elective, open elective and programme-compulsory courses.

Each department floats a set of these above-mentioned courses with a pre-declared guideline of the minimum credit requirement and course types. The students have to register for these courses accordingly. Detailed information regarding the department-specific guideline and credit requirement for various stages of the programme can be found in **Annexure III.** 

Following the Comprehensive Examination, a student is required to carry out research work leading to a doctoral dissertation.

The course structure, credits, and contents are detailed in the 'Course Contents Manual', available online via http://www.iiserbpr.ac.in/.

#### **6. REGISTRATION TO A SEMESTER**

Every student is required to register in each semester for the courses to be credited by her/him during that semester. The registration process will be carried out on the dates mentioned in the academic calendar. The Office of Academic Affairs will carry out registration of students for all the semesters including the summer semester, centrally, under the supervision of IAAC and heads of all departments. It is the duty of every student to ensure that she/he has fulfilled the pre-requisites, if any, stipulated for registering into a course. Also, the student must ensure that there is no conflict in the timetable of the courses that she/he wishes to register in. All students must be present, in person, on the day of registration. They should also carry a copy of their grade report along with them to the registration desk.

All students are strongly advised to meet with course instructors/DPGC/HoDs/DoAA prior to registration for academic counselling. Registration to the various semesters of iPhD will be subject to the following conditions:

- A student will not be allowed to register for the third semester (second year) if her/his CPI falls below the minimum allowed (see termination terms, section 7.6)
- A student will not be allowed to register for the fifth semester (third year), i.e., the entry semester
  of the Ph.D. phase, if she/he has not cleared the Comprehensive Examination, and all the
  courses credited in the first four semesters (first and second year). However, see section 11 for
  the Exit with an MS degree option.
- Over and above the minimum compulsory credit requirement, a maximum of two courses will be
  permitted in a semester under the category of repeat/substitute/improvement courses. A total of
  two such repeat/substitute/improvement course(s) will be allowed in the entire programme.

The student is entirely responsible for registration in appropriate courses.

#### 6.1 Academic load during the MS/Ph.D. phase

In the MS phase, a student should register for the credits specified by their department in each semester. A list of minimum credit requirements in each department is given in Annexure III at the end of this document. The maximum credit will be declared in each semester before the registration by the individual department.

Each course is allotted credits depending on the number of contact hours (lectures and tutorials) and/or laboratory hours (as specified in the course structure for each semester). Academic Load, AL, is defined as follows:

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AL = Lecture (L) + Tutorial (T) + Self Study (SS) + Lab (Lab) + Discussion/Seminar (D)
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Self-Study (SS) includes assignments and reports/term papers. The instructors should ensure that the workload is commensurate with the SS hours allotted. SS hours are calculated as follows:

Credits are calculated using an academic load, as follows:

Credits = Round off (AL/3) (for courses with lecture and/or lab component)

Credits = Round off (AL/2.5) (for all other courses, e.g., thesis, seminar, reading courses)

Every department can decide to reduce the academic load of a deficient student; however, this should not result in a net registration of less than 12 credits per semester. Likewise, every department can also allow a particular student to take an overload, of course, to complete the credit requirements to major/minor in a particular discipline.

#### 6.1.1 Short-Module Courses

In addition to courses that run for an entire semester, short-module courses (with one or two credits) may also be offered. Students will be permitted to register for such course at the time of registration or pre-registration.

#### 6.1.2 Maximum course load and provisions for Overload

- a) The maximum course load allowed during the first and second semesters is 24 and that for the third and fourth semesters is 28. Additional course load beyond this limit will be defined as Course overload.
- b) No overload is allowed in the first semester.
- c) In each semester, a maximum of 1 overload course will be permitted to students with a CPI ≥ 8.00, and a maximum of 2 overload courses will be permitted to students with CPI ≥ 9.00.

#### **6.2 Registration Procedure**

The list of courses to be offered in each semester will be displayed on the notice board and/or the website of the Institute. The registration procedure involves:

- a) Completing the registration form mentioning all courses to be credited in a semester.
- b) Identifying repeat/substitute courses during registration (Also see, Sections 6.5 and 6.6).
- c) Payment of fees ('Fee Structure' available online via http://www.iiserbpr.ac.in/) and clearance of dues, if any.
- d) The signing of the registration rolls in the Office of the Academic Affairs.

#### 6.3 Late Registration

If for any compelling reason (e.g., illness), a student is unable to register on the day of registration, she/he can register on or before the last date of late registration as specified in the academic calendar after payment of the late registration fee.

In the event of late registration, the semester fee must be paid on or before the last date specified for fee payment. On the day of late registration, only the late registration fine may be paid.

#### 6.4 Add and Drop

A student may add or drop the Elective / Repeat / Substitute / Improvement / Overload course(s) in which she/he is registered, on or before the last date specified in the academic calendar for the same, by submitting the add/drop form to the Office of Academic Affairs.

A student may also drop course(s) up to a fortnight after the mid-semester examination, subject to the following conditions:

- Dropping of course(s) should not result in a net registration of less the minimum credit specified by the department.
- The request to drop the course(s) must be approved by the instructors-in-charge and the Convener, DPGC of her/his department.
- Final grades will be assigned for all courses not dropped by a student in a timely fashion, even if she/he does not appear for the examinations.

#### 6.5 Repeat Courses

- A student can repeat a course in which she/he has earned an 'F' grade. Such a course is called a repeat course. Repeat course(s) must be clearly marked in the registration form as 'R'.
- For repeat courses, the grade sheet will show the new letter grade as well as the old 'F' grade. However, for computation of CPI, the new letter grade will replace the old 'F' grade.

#### **6.6 Substitute Courses**

- If a student has failed in an elective/open elective course, then she/he can substitute that course with another course.
- b) A compulsory course must be cleared by appearing in the re-examination. Such a course cannot be substituted by any other course.
- c) A departmental elective can only be substituted by another departmental elective. A course can only be substituted with another course with equal or higher credits.
- d) A maximum of two electives (open and/or department) courses with CC or CD or DD or FF grades can be substituted during the entire course of study, upon the recommendation of Convener, DPGC, and approval of DoAA.
- e) Substitute course(s) must be clearly marked in the registration form as 'S'. For substitute courses, the grade sheet will show the new letter grade as well as the old 'F' grade. However, for the computation of CPI (see, Section 7.4) the new letter grade will replace the old 'F' grade.
- f) In the event of discontinuation of a course by the Department, a suitable substitute course will be identified for students who have failed in the discontinued course. Such substituted courses will not be counted towards calculating the maximum number of substitutions permitted.

#### **6.7 Improvement Courses**

A student may be permitted to appear in re-examination for a maximum of 8 credits for improvement of grades with CC or CD or DD or FF grades.

Over and above the minimum compulsory credit requirement, a maximum of two courses will be permitted in a semester under the category of repeat/substitute/improvement courses. A total of two such repeat/substitute/improvement course(s) will be allowed in the entire programme.

#### **6.8 Auditing of Courses**

A student can audit any course in addition to the prescribed academic load with prior permission from the instructor-in-charge. The students registered for auditing a course shall be awarded the grade AU if they fulfill the requirement of minimum attendance and duly satisfactory performance as prescribed by the instructor. The instructor shall include such AU grades while submitting the final grade report for the course. If the student does not qualify for an AU grade, it will be assumed that the course has been dropped.

#### 6.9 Registration for Summer Courses/Projects

- a) A list of short module courses (see section 6.1.1) to be run during the summer semester, if offered, will be announced by the second week of March, every year. Students can register for these courses at the beginning of the summer semester.
- b) Summer research/reading projects are compulsory for the iPhD students. The exact format of these projects is department-specific.
- c) Summer projects are usually conducted within the institute and under the mentorship of one (or two) department faculty members. However, they can be allowed to go out to work in another institution, within or outside the country, only if the primary mentor is from within the institute and has agreed to such an external/collaborative project.
- d) Under special circumstances, the DPGC and HoD may allow an iPhD student to go for a summer project in another academic Institution without an in-house mentor (see above). However, such a student will not receive the UG fellowship during the tenure of the external summer project.

#### 6.10 Cancellation of registration

- a) Registration of a student will be cancelled if she/he fails to register for a given semester by the last date for late registration stipulated in the academic calendar, and consequently, she/he may be terminated from the programme (see termination rules in section 9).
- b) Semester registration of a student will also stand cancelled, if she/he remains absent for a period of four weeks or longer during a semester without obtaining prior permission from the DoAA, and she/he may be marked for termination.
- c) Except when it is for medical reasons, if a student does not appear in the end-semester examination of all the courses in which she/he is registered, the Senate may terminate her/his programme.
- d) Registration of a student in a course may be cancelled at any stage if it is found that she/he does not meet the prerequisites of that course, if there is a clash in the student's time table preventing her/him from attending the course, or if she/he is found not eligible to register for that course for any other reason.

#### 6.11 Attendance and cancellation of registration in a course

- a) A student who has remained absent from a course for more than a week without prior approval will be issued a warning by the OAA, and two such incidents could lead to her/his suspension from that semester or termination from the academic program based on the severity of the case.
- b) A biometric attendance system is mandatory for every course.
- c) If the attendance of a student in any registered course is less than 75% that student will be prohibited from appearing in the end semester examination of that particular course in that semester unless there is a compelling medical justification (production of a medical certificate will be necessary in such a case).
- d) The total number of classes to be counted as 100% will be decided and declared by the instructor on the last day of class in that particular semester.
- e) All iPhD students must submit the leave request form in case they are unable to attend classes or research lab (whichever is applicable) on designated working days. In the absence of approval, the fellowship will be forfeited for those days in that particular month.

#### 7. TEACHING AND EVALUATION

#### 7.1 Teaching

Medium of Instruction: The medium of instruction is English.

Approval of Courses: The Senate approves each course along with credits allotted for that course. Only the approved courses will be offered in a given semester.

List of Courses: The list of courses offered by a department is finalized before the pre-registration of each semester by the Head of that Department in consultation with the DPGC and DUGC. In general, within or across departments, no two courses with overlapping contents (> 50%) will be offered during a semester. The list of courses should be submitted to the Office of Academic Affairs two weeks before pre-registration.

Conduct of Courses: Each course is to be conducted by the instructor-in-charge with assistance from other instructors and/or tutors if required. It is the duty of the instructor-in-charge to run the course smoothly. Her/his duties include holding classes regularly, holding examinations, evaluating the performance of the students, awarding grades at the end of the semester, and forwarding the grades to the Office of Academic Affairs within the prescribed timeline. The answer books of the quizzes, midsemester examination, and end-semester examination should be shown to the students before assigning the grades.

Teaching Assignments: It is the duty of the Head of the Department to assign the instructor-in-charge, other instructors, and/or tutors, as required, for all the courses offered by his/her department. If any course requires the participation of instructors from other departments, the heads of those departments designate the instructors and/or tutors.

#### 7.2 Examinations during the MS phase

- **a. Dead Week:** The week prior to the end-semester examination will be called 'dead week'. In general, quizzes and assignments of theory courses should not be given during the dead week. However, all lectures and laboratories will be conducted as per schedule. Laboratory end semester examination may, however, be conducted during this period.
- **b. Scheduling of Examinations:** Time tables for the mid-semester and end-semester examinations will be prepared by the Office of Academic Affairs and circulated to all faculty members and students at least 10 days prior to the start of the examination week. The schedule for core course examinations must be strictly followed. Also, all examinations (core and professional courses) must be conducted during the approved examination week only.
- c. Make-up Examinations: If a student misses the end-semester examination in one or more than one course due to genuine reasons, within a day or more (in exceptional case) of missing the scheduled examination she/he can make a request to the instructor for a make-up examination, under intimation to DoAA, personally or by nominating a suitable person. Such a request must be made in writing and submitted to the Office of Academic Affairs. If a student is ill, she/he must substantiate it with a certificate from the Medical Officer of the Institute.
- **d.** Only one make-up examination in lieu of the end-semester examination is allowed per course. When a mid-semester examination is missed, it would be the instructor's prerogative to decide how to evaluate the student and to assess the reasons given by the student. The instructor can give a make-up mid-semester examination or can choose to prorate the performance of the student, alternatively.
- **e. Duration of Examinations:** The duration of end-semester examinations should be 2 to 3 hours, and the mid-semester examinations should be 1½ to 2 hours.
- f. Invigilation and attendance during examinations: Instructors for all the courses must be present during the mid-semester and end-semester examinations. Typically, the invigilator conducting the exam should be the instructor who taught the course. If for some unavoidable reasons, they are unable to be present, then he/she should depute a representative to invigilate on his/her behalf.

Visiting faculty members are required to be present or make suitable arrangements for invigilation. It is mandatory to keep a record of attendance for all the exams/quizzes. The record of attendance is the responsibility of the instructor.

#### Matters relating to question papers and answer scripts:

Instructors should collect only the required number of answer booklets and supplementary copies. These sheets will be date-stamped to avoid potential malpractice. Excess supplementary sheets should be returned to the Office of Academic Affairs/In-charge, Lecture Hall Complex.

The instructor should preserve a record of all written components for the course assessment for a minimum of two semesters after the end-semester examination. End semesters answer scripts should be retained for two semesters after the conclusion of the examinations. Thereafter, all answer scripts may be destroyed.

#### **Misconduct During Examination**

All cases of misconduct during the examination must be reported to DoAA/Office of Academic Affairs by the instructor/invigilator on the same day via email/hardcopy.

In cases where cheating/misconduct is detected during the examination, the disciplinary action taken by the instructor will be final and binding. The instructor should inform about the disciplinary action initiated by her/him to the student involved and the Office of Academic Affairs.

In case the cheating is detected after the conclusion of the exam (*e.g.*, while grading), the invigilator may initiate action under intimation to the student and the Office of Academic Affairs.

In the event that the student contests the decision of the instructor/invigilator, the case will be referred to the disciplinary action committee.

#### Do's and Don'ts for Students During Examinations

- Students must take their seats 10 minutes prior to the start of the examination. Students should adhere to the seating arrangement determined by the instructor/invigilator if any. seated, students must maintain total silence in the examination hall.
- Students must bring all stationery items that they might require during the examination, like a pen, pencil, eraser, sharpener, scale, compass, *etc*.

#### Don'ts

- Students should not chatter, smile, or attempt to communicate with each other either verbally or non-verbally.
- Students are strictly prohibited from carrying rough paper, a book, a wallet, and a calculator (permitted only if the instructor allows explicitly) inside the examination hall. If any prohibited item is found with them, the invigilator is entitled to assume that the student was cheating during the examination and initiate disciplinary action accordingly.
- Mobile phones and electronic devices are not allowed inside the Lecture Halls and classrooms of the academic building during examination week. Such items, if found with a student, will be confiscated.

Students should not indulge in any act of indiscipline.

#### 7.3 Evaluation/Assessment

- I. The assessment of students in a course is a continuous process. It is based on their performance in the mid-semester examination, the end-semester examination, quizzes, assignments, attendance, and makeup examination (if any).
- II. The answer scripts of mid-semester and end-semester examinations should be shown to the students before grades are assigned. The instructor must retain the answer sheets for a minimum of two semesters before destroying them.

#### Weightage for various evaluation components

**a.** For the theory courses, the weightage is as follows:

Minimum Weightage		Maximum Weightage for Other Components (quizzes, assignments, attendance, term paper, seminar, etc.)	
Mid Semester	End Semester	30%*	
20%	30%		

<sup>\*</sup>No more than 10% weightage should be given to the oral examination and attendance, if any.

The weightage for various components should be communicated clearly to the class at the start of the semester.

**b.** If laboratory work is a part of the course, it should be weighted appropriately according to the total credits for the course. For example, in a given course of four credits, if the credits for theory and laboratory parts are in the ratio of 3:1, the final grades for the course should be assigned in such a manner that the weightage ratio for the theory and the laboratory parts remains 3:1. Each laboratory

component should consist of at least 10 experiments if the students attend the laboratory once a week. It should be assessed based on the participation and performance of the student in each experiment as well as in the final examination.

#### 7.4 Grading

- a. Submission of Grades: Prior to assigning a final letter grade, the instructor-in-charge of each course must show the answer sheets to the students. The letter grades given by the instructors must reflect the progress of the student based on her/his performance in the mid-semester examination, end-semester examination, quizzes, assignments, and regular attendance in the classes. Final grades must be sent/entered online and a signed hardcopy must be submitted to the Office of Academic Affairs before the last date of grade submission as mentioned in the academic calendar.
- **b. Grades:** There are nine letter grades: AA, AB, BB, BC, CC, CD, DD, FF, and AU. The letter grades, their descriptions, and their numerical equivalents on a scale of 10-points (called grade point) are as follows:

Grade	Weight (grade point)
AA	10
AB	9
BB	8
ВС	7
СС	6
CD	5
DD	4
FF	0
AU	0

The students registered for auditing a course shall be awarded the grade AU if they fulfill the requirement of minimum attendance and duly satisfactory performance as prescribed by the instructor. The instructor shall include such AU grades while submitting the final grade report for the course. If the student does not qualify for an AU grade, it will be assumed that the course has been dropped.

In addition, there is an I grade which stands for Incomplete. Besides these grades, there are two other grades S and X. S stands for Satisfactory and X for Unsatisfactory.

c. Incomplete Grade: An I (Incomplete) grade in any course may be awarded to a student who has missed the end-semester examination because of some genuine reason, but otherwise has completed all other requirements satisfactorily. An I grade in a course should not be given to a student because she/he has failed in it. An I grade must, however, be converted into a proper letter grade by the instructor-in-charge and should be communicated to the Office of Academic Affairs by the last date for submission of grades for make-up examination, as specified in the academic calendar. If the instructor-in-charge does not intimate the Office of Academic Affairs on time, all the I grades awarded will be automatically converted to FF.

- **d.** Satisfactory and Unsatisfactory Grades: Grades S and X do not carry any numerical weight, and are not used for the computation of SPI/CPI. Grade S implies that the student has earned the credits. Grade X implies that the student has failed in the course and thereby does not earn any credit.
- e. Change of Grade Already Awarded: A letter grade once awarded shall not be changed, unless a request is made by the course instructor-in-charge and is approved by the Chairperson Senate. Any request for a change of grade must be made within six weeks of the start of the next semester with all the relevant records and justifications.
- f. Semester Performance Index (SPI): The Semester Performance Index (SPI) is a weighted average of the grade points earned by a student in all courses credited and describes his/her academic performance in a semester. It is calculated as follows:

$$SPI = \frac{\sum_{i=1}^{n} c_i g_i}{\sum_{i=1}^{n} c_i}$$

where  $c_i$  = credit for  $i^{th}$ course;  $g_i$  = grade point secured by the student. The summation is over all n courses credited by the student in that semester.

**g.** Cumulative Performance Index (CPI): The Cumulative Performance Index (CPI) indicates the overall academic performance of a student in all courses registered up to and including the latest completed semester. This can be calculated as:

$$CPI = \frac{\sum_{i=1}^{n} c_i g_i}{\sum_{i=1}^{n} c_i}$$

The summation is over all the 'n' courses credited by the student in all the completed semesters. Whenever a student is permitted to appear for re-examination in a course, then the new letter grade replaces the old letter grade in the computation of CPI.

- h. Grade Report: The grade report, with details of courses registered and grades obtained, SPI for each semester, and the CPI based on the grades of all courses taken up to and including the semester, will be available to the student once the results for that semester are declared officially. One copy of the official grade report for any semester will be available for free. Additional copies will be charged. At the end of the programme a transcript will be provided.
- i. Withholding of Grades: The grades of a student can be withheld if she/he has not paid the dues or if there is a case of indiscipline pending against her/him or for any other reason.

#### 7.5 Re-examination

The re-examination will be conducted for all courses in which students have earned an 'FF' grade. A student can choose either to take the re-examination during the summer semester for the course she/he has failed or register for these courses (by taking overload) during the regular semester.

If a student chooses to appear for re-examination (for a course in which she/he has earned an 'FF' grade), she/he should do so within a period of one year.

Over and above the minimum compulsory credit requirement, a maximum of two courses will be permitted in a semester under the category of repeat/substitute/improvement courses. A total of two such repeat/substitute/improvement course(s) will be allowed in the entire programme.

a. Re-examination schedule: The re-examination will be conducted 2 weeks prior to the registration of the first semester, *i.e.*, around 15<sup>th</sup>July, every year. Students can appear for re-examination in any number of courses. Such students will have to pay an examination fee (as per the rules of the office

- of Academic Affairs). The student should submit the online re-examination form and pay the fee online by 1<sup>st</sup> July, every year.
- **b. Grading policy:** For the purpose of CPI calculation, re-examination will be treated as similar to repeating a course. For all students appearing for re-examination, a fresh grade report will be issued. If the 'FF' grade is obtained in the re-examination, it will not be considered for determining the criteria for substitution (see section 6.6 and 6.7).

If a student registers and appears for re-examination within one year of failing the course, the grades for such students will be assigned as per the grading policy for the original class. All quizzes, mid-semester, assignment, and other component scores earned during the regular semester will be retained and only the end-semester score obtained in the re-examination will replace the original end-semester score to award the grade.

For students appearing in re-examination after one year (only applicable for first-year courses), only the re-examination scores will be used to award the final grade and such a grade will be capped at a maximum of 'CC'. The instructor who has taught the course in the most recent semester will conduct the re-examination.

**c.** Course offerings: In view of the introduction of re-examination, courses will not be offered in order to facilitate the clearing of backlogs during the summer semester.

#### 7.6 Inadequate Academic Performance

The academic performance of each student is reviewed at the end of each semester, based on the credits earned by her/him in that semester. For all iPhD students, the minimum CPI should be 7.0. If the CPI falls below 6.50 after the first year, the student shall be found *Academically deficient*.

**7.6.1 Warning and Academic Probation:** When a student fails to earn a CPI ≥ 7.0 for the first time in a year, her/his fellowship will be stopped (also see section 12). The resumption of the fellowship will be assessed after the next semester on the basis of the updated CPI. A student will be placed on warning and the Office of Academic Affairs will send a letter of warning to the student if the CPI falls below 7.5 after a semester.

If a student fails to earn a CPI  $\geq$  6.50 at the end of any semester, she/he will be placed on academic probation, and the Office of Academic Affairs will intimate him/her. Even in the event that a student has not been placed on a warning before (that is, her/his CPI was not  $\geq$  6.50 in the past), she/he will still be placed on academic probation. The following conditions shall be applicable to students on warning/academic probation:

- She/he shall preferably register for all courses during re-examination/regular semester (if the course is being offered) in which the letter grade 'FF' has been obtained.
- She/he shall not hold any official position or represent the Institute in any extra-curricular activities during the period of warning/academic probation.
- She/he shall submit an undertaking counter-signed by the parents, ensuring good academic performance. The proforma for the undertaking is available in the Office of Academic Affairs.
- Any other terms/conditions laid down by the Senate.

**7.6.2 Termination due to inadequate academic performance:** The minimum credits to stay in the academic programme at various stages in the programme are provided below. If a student fails to earn the specified minimum credits (see table below), her/his academic programme will be considered for termination.

Semesters	Minimum CPI required after each year
Second (end of 1st year)	5.00
Fourth (end of 2nd year)	6.00

If at the end of the fourth semester (end of  $2^{nd}$  year), a student's CPI is  $\geq 6.50$  but less than 7.00 (minimum CPI required to appear in the Comprehensive examination), she/he will be asked to **Exit with an MS degree**, after duly fulfilling the criteria of the MS degree (see Exit option).

If at the end of the fourth semester (end of  $2^{nd}$  year), a student's CPI is  $\geq 6.00$  but less than 6.50

If at the end of the fourth semester (end of  $2^{na}$  year), a student's CPI is  $\geq 6.00$  but less than 6.50 (minimum CPI required to be eligible for Exit with an MS degree without appearing in the Comprehensive examination), she/he will have an option of taking a **Buffer semester** to reappear for some backlog/improvement courses. If the CPI of such a student recovers to  $\geq 6.50$ , she/he will be allowed for the **Exit with an MS degree** option.

In addition to the above, the student may also be terminated from her/his programme if she/he does not appear in the end semester examination of all courses in which she/he is registered (also see, Section 6.9).

**7.6.3 Appeal against Termination:** A student whose programme has been terminated or who has been recommended for enforced Exit with MS degree, may appeal to the Chairman, Senate, for reinstatement in the programme. In cases of termination due to inadequate academic performance, the student should clearly explain the causes for the poor performance, along with explaining why those causes will not adversely affect her/his performance in the future. The Senate shall take a final decision after considering all the available inputs. However, the Senate may not entertain any further appeal(s) for review unless substantial additional information is brought to its notice. Appeals against termination and for reinstatement may not be entertained after a certain period as specified in the termination letter.

#### 7.7 Comprehensive Examination

- **a.** After completing a department-specific credit requirement, students are required to pass a comprehensive examination, in order to continue in the doctoral programme (i.e., Ph.D. phase).
- **b.** The minimum CPI required to appear in the comprehensive examination is 7.00.
- **c.** The comprehensive examination must be passed in a maximum of two attempts.
- d. Department may have additional minimum requirements.
- **e.** Rules for the Comprehensive examination are as follows:
  - I. The comprehensive examination should be conducted after the end of the 4<sup>th</sup> semester and before the beginning of the 5<sup>th</sup> semester.
  - II. The comprehensive examination will be either oral or written, or a combination of both, as detailed in the guidelines of individual Departments, and duly approved by the Senate.
  - III. The departmental Integrated Ph.D. Comprehensive Examination Committee (iCEC) will consist of a minimum of three members that will look after the Comprehensive examination of all iPhD students within a department. It will be constituted by the convener of DPGC with the endorsement of the HoD and finally approved by DoAA. iCEC shall be chaired by the Convener, DPGC, or HoD.
  - IV. Although no grades are assigned for the comprehensive examination, students are required to pass the same. A student will be considered to have passed the comprehensive examination if all except not more than one member of the board are satisfied with the student's performance in the examination. The report of the comprehensive examination must be sent to the DoAA within 2 weeks after the examination.
  - V. If the student failed in the comprehensive examination in her/his first attempt, a second comprehensive examination will be conducted by the same iCEC, unless otherwise another committee for the same purpose has been approved by the Chairperson, Senate, on the recommendation of the Convener, DPGC/HoD and the DoAA. No student shall be allowed to appear in the comprehensive examination more than twice. Students who have failed to qualify for the comprehensive examination in two attempts will be recommended for the Exit-with-an-MS-degree option (see section 11: Exit option).
- **c.** A student enrolled in the iPh.D. programme is formally registered for a Ph.D. degree after she/he has passed the comprehensive examination.
- **d.** After the comprehensive examination, a thesis supervisor will be formally assigned to a student. The details of this and the associated protocols is given in Section 8.1.

#### 7.8 Courses during Ph.D. phase:

As per the department-specific guidelines, the iPhD students may have to take up compulsory courses and/or research/reading projects in the 5<sup>th</sup> and 6<sup>th</sup> semesters. All such courses and/or projects have to be passed with an S grade (satisfactory grade) before the 9<sup>th</sup> semester. No candidate with a backlog course will be allowed to appear for the JRF-to-SRF assessment. In the case of an X grade (unsatisfactory grade), the course will have to be repeated and the JRF-to-SRF assessment will be delayed.

#### 8. Ph.D. DISSERTATION AND ASSOCIATED GUIDELINES

#### 8.1 Assignment of Thesis Supervisor

A Ph.D. thesis supervisor will be assigned to every student after the student successfully clears the comprehensive examination. The guidelines listed below will be followed in assigning thesis supervisor(s):

- **a.** Preferably the guide allotment should be done when a student completes her/his comprehensive examination. Though it can be extended as per the requirements and recommendation of Convener, DPGC/HoD, it should not go beyond the end of the 6th semester. Exceptions can be permitted on a case-by-case basis with the permission of Convener, DPGC, HoD, and DoAA.
- b. The thesis supervisor of a student will normally be appointed from amongst the faculty members at IISER Berhampur in accordance with the guidelines of each Department. Besides the other rules laid by the DPGC, criteria such as the student's preference for a research area and her/his performance in the course work and lab rotations/projects at IISER Berhampur may be considered for assigning thesis supervisor(s) by the Department. A detailed document containing the procedure and guidelines of the allotment of thesis supervisor should be prepared by each Department/DPGC and approved by the DoAA. On a case-by-case basis, a student from a Department may be allowed to choose a supervisor or co-supervisor from another Department, subject to the approval of Convener, DPGC/HoD of both the Departments followed by the approval of DoAA.
- c. A student shall not normally have more than two thesis supervisors at any given time.
- **d.** Under special circumstances, the Senate may allow a scientist/faculty member from another academic Institution to be a co-supervisor.
- **e.** The assignment or change of supervisor(s) of a student must be intimated to the Office of Academic Affairs. Addition or change of supervisor is not allowed once the thesis is submitted. In case a supervisor of a Ph.D. student is changed or a co-supervisor is added, the student cannot submit her/his thesis until after six months of the change.

#### 8.5 Assignment of Alternate Thesis Supervisor

For Ph.D. students who are assigned to only one thesis supervisor the criteria for assigning alternate supervisors under specific circumstances are as follows:

- **a.** If the thesis supervisor of the Ph.D. student is away on long leave, the DPGC will appoint a new supervisor or a co-supervisor, in consultation with the thesis supervisor of the Ph.D. student. In case the thesis supervisor of a Ph.D. student goes on a short leave, the DPGC will appoint an administrative supervisor to fulfill various formalities.
- **b.** In the event that a thesis supervisor proposes to go on leave when a Ph.D. student has completed all research work and is only writing her/his thesis, the DPGC may appoint an administrative supervisor. This supervisor will take care of all formalities like submission of the thesis, suggesting a list of examiners, and conducting the Ph.D. defense.
- **c.** If the thesis supervisor of a Ph.D. student retires, resigns, or otherwise ceases to be a faculty member of the Institute, the DPGC will appoint a new thesis supervisor or co-supervisor.

#### 8.6 Research Progress Committee and Annual Progress Seminar

Members of the **research progress committee (RPC)** will be proposed by the thesis supervisor immediately after the student has been allotted a supervisor. The proposed list of names will be forwarded by the Convener, DPGC with the recommendation from HoD for the approval of the DoAA. In

case any member of the RPC goes on long vacation exceeding a duration of three months, or resigns or retires from the Institute, the thesis supervisor should suggest new members and the request should be forwarded by the Convener, DPGC/HoD for the approval of DoAA. The thesis supervisor can also request for an addition/replacement of the existing member(s) of RPC with proper justification and such request must be forwarded by the Convener, DPGC/HoD for the approval of the DoAA.

Depending on the department-specific guidelines, a **mid-year assessment** may be conducted in the first year of the Ph.D. phase, preferably at the end of the 5<sup>th</sup> semester of the iPhD programme. RPC can conduct the assessment and submit a report.

An iPh.D. students must give an **annual progress seminar (APS)**, once every year beginning from 3<sup>rd</sup> year. The first APS thus will be conducted at the end of 3<sup>rd</sup> year. For APS, a student must compile a report describing the work that has been performed in the past year and submit it to the RPC at least a week before the seminar. The student must then deliver the seminar and is open to all interested members of the Department. At the end of the seminar, a closed-door discussion with the RPC should be arranged. The objective of the seminar is to provide feedback on the research carried out by the iPhD student in the past year and make suggestions for continuing and refining her/his research.

The recommendation of the RPC during the second APS is required for the promotion of students from **JRF to SRF** under the institute fellowship. However, in the case of external fellowship, examiners (external and internal) can be added to the RPC as per the guidelines of external funding agencies.

#### 8.6.1 Composition of the RPC

- a. Research Supervisor (Convener) and/or co-supervisor (if any).
- **b.** Internal member(s) (Minimum one faculty member from the Department)
- **c.** External Member(s) (Minimum one faculty member chosen from outside the Department, or subject expert(s) from outside the Institute)

Note: The supervisor(s) and at least two other members should be present in any RPC meeting.

#### 8.6.2 Functions of the RPC

- a. The RPC will meet once every year to review the progress of the Ph.D. student in the Annual Progress Seminar. The RPC may also decide to meet in between the regular meetings if required under special circumstances such as insufficient progress of the Ph.D. student or on request by the supervisor/student. The RPC will also provide a grade "Satisfactory" or "Unsatisfactory" after every meeting. Two successive "Unsatisfactory" may result in the termination of the Ph.D. registration and cessation of fellowship. It may lead to the removal of the student from the rolls if recommended by the RPC and approved by the DoAA.
- **b.** The RPC may recommend a change of supervisor or appointment of a co-supervisor with valid reasons to Convener, DPGC/HoD.
- **c.** The thesis supervisor may consult with RPC for constituting the panel of thesis examiners.
- **d.** The thesis supervisor may request the RPC to review the reports of the examiners on the thesis.
- e. The thesis supervisor may request the RPC to participate in the Ph.D. defense.

#### 8.8 Graduate Seminar

Every student who has been admitted to the candidacy for Ph.D. degree (after successful completion of the comprehensive examination, see section 7.7) need to present a seminar covering recent developments or an advanced topic in her/his area of research or as per the Departmental policy within one year of qualifying the comprehensive examination. The assessment report for the graduate seminar has to be submitted to the DoAA through the thesis supervisor in consultation with RPC.

#### 8.9 Open Pre-Synopsis Seminar

Prior to the submission of the synopsis and Ph.D. thesis, a comprehensive internal assessment of the research work should be done in a pre-synopsis seminar. The thesis supervisor should recommend two to three faculty members (in addition to RPC) to evaluate the student's research work. All the work that has been carried out by the student during her/his Ph.D. is examined, and only after the permission of this

committee one is allowed to submit the synopsis and thesis. The synopsis and thesis should be submitted within four months from the date of the pre-synopsis seminar. In exceptional circumstances, the student may seek an extension of up to three months with proper justification forwarded by the thesis supervisor and Convener, DPGC, to DoAA. However, if the thesis is not submitted within the permitted period including the extension, the open pre-synopsis seminar already conducted will stand cancelled and the student will be required to give a fresh seminar before she/he submits her/his synopsis and thesis.

The pre-synopsis seminar must include the research work completed by the Ph.D. student in totality and therefore can be considered as a rehearsal for the Ph.D. defense. A satisfactory completion report has to be submitted to the DoAA through the thesis supervisor and Convener, DPGC. Emphasis should be placed on publications and patents to ensure that the Ph.D. thesis meets the highest standards of academic excellence. A notice for the pre-synopsis seminar must be displayed 7 days in advance in the Institute. A copy of the notice should be submitted to the Office of DoAA. The general Public is also permitted to attend the pre-synopsis seminar. The student may incorporate comments/criticism obtained from the audience in her/his thesis as per the recommendation of RPC.

#### 8.10 Submission of Synopsis and Constitution of the Ph.D. Thesis Evaluation Board

The thesis will be evaluated by a board, which is approved by the Chairperson, Senate. Members of the board should be very well recognized in the field.

The procedure for submission of synopsis, thesis, and constitution of the Thesis Evaluation Board (TEB) is as follows:

- **a.** A hardcopy and a softcopy of the synopsis should be submitted along with the list of examiners at least 3 weeks before the submission of the Ph.D. thesis.
- **b.** The thesis supervisor should propose a list of at least 6 external examiners (within India and/or abroad, with contact details including email, fax, telephone number, and postal address) to the Office of DoAA.
- **c.** Copies of the thesis must be submitted to the Office of Academic Affairs after 3 weeks of the submission of the list of examiners (preferably three soft-bound/spiral copy and a soft copy).
- **d.** TEB is constituted with the following members: Thesis supervisor(s), a RPC member, and at least three external examiners.
- e. The Chairperson, Senate, in consultation with the Chairperson, IAAC, and DoAA, will select the names of the thesis examiners from the list provided by the thesis supervisor to constitute the TEB. The external thesis examiners constituting the TEB can be all from India, or partly from India, and partly from abroad. However, a minimum of one external thesis examiner should be from India.
- f. The Chairperson, Senate, may add examiners and/or ask for an additional list of examiners if required. In case the Chairperson, Senate, is the thesis supervisor, the TEB will be constituted by the Chairperson, IAAC, and DoAA. In case the DoAA is the thesis supervisor, the Chairperson, Senate will constitute the TEB, in consultation with the Convener, DPGC. In case the Chairperson, IAAC, and DoAA is the supervisor of the Ph.D. student, the above exercise will be carried out by the Dean, Faculty Affairs.
- g. Chairperson, IAAC, and DoAA will send a copy of the synopsis to each member of the TEB for obtaining their consent to act as thesis examiners. If no consent is received within 10 days, the Chairperson of IAAC and DoAA will communicate with other examiners in the list (as approved by the Chairperson, Senate), and this exercise will continue until an adequate number (at least three) of examiners have consented. In rare circumstances, the Chairperson, IAAC, and DoAA may request another list of suggested examiners from the thesis supervisor, in case the original list is exhausted and the adequate number of examiners are not found.
- h. After consents are obtained from the examiners, a copy of the thesis (softbound hardcopy/softcopy, depending upon the preference of the examiner) is sent to each examiner with a request to provide a complete evaluation report within 3 months. If no response is received within the stipulated period, a reminder will be sent and the waiting period will be extended by another month. If no response is received even after 4 months, further action will be initiated on a case-by-case basis. In all cases, the names of

the thesis examiners will be kept confidential till the Ph.D. defense. After the evaluation of the Ph.D. thesis is completed, the Office of Academic Affairs will communicate the names of the thesis examiners from outside the Institute to the thesis supervisor. The thesis supervisor will coordinate with the external examiner(s) for Ph.D. defense.

#### 8.11 Ph.D. Thesis Evaluation

- I. Upon receiving reports from the thesis supervisor(s), a RPC member, and at least two out of the three external examiners, the DoAA will place the thesis in one of the following categories in accordance with the nature of recommendations:
  - a. **Category 1:** The examiner has not pointed out any errors and has no corrections/suggestions. The examiner has recommended that the thesis be accepted as is.
  - b. **Category 2:** The examiner has pointed out only grammatical errors like punctuation, spelling mistakes, or language problems. Suggested changes must be incorporated in the thesis to the satisfaction of the TEB.
  - c. Category 3: The examiner points out minor technical mistakes/raises queries/suggests some modifications but does not subject the acceptance of the thesis to the answering of queries/incorporation of suggestions. The student must respond to the queries raised by the examiner and submit the revised thesis to the Office of Academic Affairs through her/his thesis supervisor. Suggested changes must be incorporated in the thesis to the satisfaction of the Thesis Defense Board.
  - d. Category 4: The thesis examiners reject the thesis in its present form and suggest major technical errors, clearly mentioning that the thesis cannot be accepted unless she/he is satisfied with the changes made by the student. In this case, the thesis supervisor(s) will communicate the changes carried out in the thesis, if any, in response to the queries raised by the examiner(s) with a covering note and send it to the examiner through the DoAA with a request to respond within four weeks. If no response is received within the stipulated period, a reminder will be sent and the waiting period will be extended by another two weeks. If no response is received even after six weeks, further action will be initiated on a case-by-case basis.
  - e. Category 5: The thesis examiners find the thesis unsuitable and reject it. The thesis examiners explicitly mention that this thesis cannot be considered even with major revisions/resubmissions. If one of the examiners rejects the thesis, the matter will be referred to the Chairperson, Senate, for deciding further course of action. If two or more examiners reject the thesis, the thesis will be rejected. Students receiving such a recommendation will be terminated from their academic programme.
- II. Copies of the report, along with the category of the thesis (without revealing the identity of the examiners), will be communicated to the thesis supervisor(s).
- III. On completion of the process detailed above, the Chairperson, IAAC, and DoAA will intimate the concurrence of the Chairperson, Senate, if given, to the supervisor, to initiate the constitution of the defense board. This concurrence of the Chairperson, Senate, will be given if all the examiners recommend acceptance of the thesis.
- IV. In case the Chairperson, IAAC, and DoAA is the supervisor of the student concerned, the above processing will be conducted by Dean, Faculty Affairs.

**Note:** If plagiarism is detected at any stage during the Ph.D. programme or even after awarding the degree, disciplinary action including termination from the programme or withdrawal of the degree, as appropriate, will be initiated by the Institute.

#### 8.12 Ph.D. Defense Board

Upon approval of the Ph.D. thesis by the examiners selected, the supervisor shall arrange the Ph.D. defense. The Ph.D. defense normally occurs within six months after submitting the thesis. The defense is an open seminar where the Ph.D. student must present and defend her/his work and answer queries raised by the examiners, Ph.D. Defense Board and audience.

The procedure for constitution of the 'Ph.D. Defense Board' (PDB) is as follows:

- **a.** The Board for Ph.D. defense shall consist of one of the three external examiners, thesis supervisor(s), and DoAA.
- **b.** The DoAA will propose the external examiner for PDB in the prescribed format for the approval of the Chairperson, Senate.
- c. The office of Academic Affairs will communicate the approval of PDB to the thesis supervisor.
- **d.** Thereafter, the DoAA office in consultation with the thesis supervisor will make all necessary arrangements (including travel and accommodation for the external examiner, and scheduling, announcing, and conducting the Ph.D. defense).

#### **Composition of PDB:**

- External examiner (Suggested by the DoAA and appointed by Chairperson, Senate).
- **b.** DoAA (Convener)
- **c.** Thesis supervisor(s)

#### 8.13 Ph.D. Defense

- **a.** The Ph.D. defense will be an open examination. The DOAA will fix the date in consultation with the thesis supervisor. A notice of the same must be displayed 7 days in advance in the institute.
- **b.** The general public is permitted to attend the defense seminar.
- **c.** Following the defense seminar, there is a closed-door discussion with the Ph.D. student and PDB.
- d. The PDB shall,
  - examine the thesis reports,
  - examine if necessary, modifications suggested by the thesis examiners have been incorporated,
  - examine the candidate on questions raised by the TEB,
  - authenticate the work as the student's own,
  - judge if the presentation of the work by the student and the answers to the questions asked have been satisfactory, and
  - provide a signed report of the candidate's performance and recommend the award of Ph.D. degree.
- e. If a candidate has not passed, the PDB will decide whether,
  - the candidate may be given another chance to defend her/his thesis, and will specify the
    approximate date. The same PDB will conduct the defense unless a different board is
    approved by the Chairperson, Senate. In the second attempt, the PDB will declare
    whether the student has passed or failed as per the criteria laid down above, but will not
    recommend holding the third attempt.
  - the candidate is declared to have failed.
- **f.** On receipt of the report that the student has defended her/his thesis, the DoAA may issue a provisional Ph.D. degree and initiate further proceedings for the award of the degree.
- **g.** If the candidate has failed, the matter will be brought to the attention of the Chairperson, Senate, for further action (PDB should submit a report to Chairperson Senate, explaining the grounds of failure).

#### 8.14 Submission of the Final Thesis

Hard-bound copies of the Ph.D. thesis in the prescribed format should be submitted only after incorporating the corrections if any required by the TEB/PDB. The thesis supervisor should certify the incorporation of all comments raised. Copies of the Ph.D. thesis (prepared according to the duly approved format) should be submitted as per the requirement of the Department. Two copies of the duly signed hard-bound thesis (one of which will be forwarded to the institute library) and a soft copy should be deposited in the Office of the Academic Affairs no later than 15 days after the completion of Ph.D. defense examination.

#### 9. TERMINATION FROM THE iPhD programme

A student will be terminated from the programme under any of the following circumstances.

- **a.** Failure to maintain a minimum CPI (see Section 7.6.2) at the end of each academic year, will lead to the removal of the student from the rolls.
- **b.** Failure to clear any compulsory course even after re-examination will lead to the removal of the student from the rolls.
- **c.** Failure to register for a semester or cancellation of the registration for any of the reasons specified in section 6.10 and 6.11 may result in a student being removed from the rolls.
- **d.** A student may be removed from the rolls at the Ph.D. phase based on the recommendation of the RPC, if she/he received two successive "Unsatisfactory" grades in two Annual Progress Seminars.
- **e.** A student may be removed from the rolls as a result of disciplinary action for serious misconduct and/or violation(s) of the Code of Conduct of the Institute. The details can be found in Annexure I and II.

#### 10. RESIDENCE AND PROGRAMME DURATION

- a. Every iPhD student will be provided residence in the Institute hostel. Students staying on campus have to reside in the hostel to which she/he is assigned. A student residing in the hostel has to abide by the rules and regulations laid down by the Office of Students' Affairs. (See, Annexure I)
- **b.** The maximum duration of the Integrated Ph.D. programme is 14 semesters. At the end of 14 semesters, the registration will automatically be cancelled and any re-registration must have the approval of the Senate.
- **c.** Under exceptional circumstances, the period of residency can be extended up to 9 years with the approval of the Chairperson, Senate, on the recommendation of Convener, DPGC, and DoAA.
- **d.** The minimum duration for iPhD programme is 5 years, including the first two years of the MS-phase.
- **e.** MS Degree will be awarded to the students of the Integrated Ph.D. programme, who either wish to exit during their programme or failed to clear the Comprehensive examination at the end of the second year. The maximum duration for completing the requirement of MS degree is 6 semesters with no provision of extension. For more details, refer to section 11.

#### 11. Exit with MS degree (Exit option)

Candidates enrolled in the iPhD programme will have an option of exiting the programme with an MS degree, without continuing for the Ph.D. degree. This is referred to as the *Exit option*.

#### a. Involuntary exit:

A student who has (a) appeared in the comprehensive examination (CE) but has failed to clear the CE even after the second attempt, or (b) not qualified for the CE for low CPI ( $6.50 > CPI \ge 6$ ), or (c) opted for the Buffer semester (see section 7.6.1) at the end of the second year and recovered a suitable CPI to be eligible for an Exit option, will be recommended for a compulsory exit.

#### b. Voluntary exit:

A student can voluntarily opt for the Exit at the time of the CE or afterward.

In the case of both A and B, the following guidelines and minimum requirements have to be met in order to be eligible for an Exit with an MS degree:

- 1. A student should have no backlog and a minimum of 6.00 CPI.
- 2. A student has to complete a one year MS dissertation after the second year and an MS thesis has to be submitted.

- 3. A dissertation supervisor will be assigned to each such student by the DPGC as per the Department policy.
- 4. A mid-term review of the dissertation will be conducted at the end of the 5th-semester, following the method outlined by the department.
- 5. At the end of the sixth semester, a final assessment will be conducted before the student is allowed to submit her/his thesis. The modalities of the final assessment will be as per the Departmental guidelines. The MS thesis will be reviewed and assessed by a committee (MS thesis review committee). This committee will be constituted by the convener of DPGC with the endorsement of the HoD and finally approved by DoAA. The committee will consist of the PI and at least two other members one nominated by the DPGC and at least one member nominated by the PI.
- 6. Each department may have additional credit requirements for Exit with an MS degree. In addition to the MS dissertation, credits can be earned through theory and/or practical courses/reading/research projects as per the Departmental guidelines.
- 7. All requirements for the MS degree should ideally be fulfilled by the end of the 6th semester.
- 8. **Buffer semester**: A student may be allowed a semester (i.e., seventh semester) as a buffer to clear backlogs accrued during the 5th and/or 6th semester(s).
- 9. No further extension will be granted after the buffer semester mentioned above (poin#8).
- 10. Students enrolled for the Exit option shall not be entitled to any Institutional fellowship during the fifth and sixth semesters.
- 11. Under exceptional circumstances, with the approval of the DPGC and the Supervisor, a student in the Ph.D. phase can opt for a premature termination and Exit with an MS degree. Such students will be asked to submit an MS thesis based on the work that she/he has already conducted after the CE. Such students have to apply for the Exit and give notice prior to the date on which she/he intends to discontinue. The notice period will be six months for 4th and 5th-year students, and three months for 6th and 7th-year students. If a student is availing Institute Ph.D. fellowship, during the notice period, the fellowship will be withdrawn. If a student is receiving an external fellowship, the funding agency rules relevant to such a scenario will apply.

#### 12. Fellowship

- **a.** In the first two years (i.e., 4 semesters) of the programme, the students will be awarded an Institute scholarship (UG fellowship) of Rs.12,000/- per month until the comprehensive examination, provided the student maintains a minimum CPI of 7.00 out of 10 at the end of each academic year.
- b. When a student fails to earn a CPI ≥ 7.0 for the first time in a year, her/his fellowship will be stopped. The resumption of the fellowship will be assessed after the next semester on the basis of the updated CPI. Upon resumption of the fellowship, the DoAA may consider disbursal of arrears for the deficient period.
- **c.** After clearing the comprehensive examination, the fellowship will be upgraded to a Ph.D. fellowship, which is equivalent to that of UGC-CSIR JRF/SRF excluding HRA. The fellowship also includes a yearly contingency grant. The Ph.D. fellowship will be paid for a maximum of 10 semesters.
- **d.** Fellowship stands automatically terminated at the end of 14 semesters for which the student registered.
- **e.** If a student receives two consecutive "Unsatisfactory" grades in the APS's during the Ph.D. phase, the institute fellowship may be terminated based on the recommendation of the RPC.
- f. The students are encouraged to bring external fellowship at the Ph.D. level. If a student receives an external fellowship, the same will be governed by the rules laid out by the external funding agency.

#### 13. Degree

At the end of the entire programme, after a candidate has successfully defended her/his doctoral thesis, two separate degrees - (a) MS and (b) Ph.D., will be awarded. For the purpose of external fellowships

and other similar requirements, a *provisional* MS degree will be awarded to a candidate after the successful completion of the Comprehensive Examination.

#### 14. Leave rules

Leave rules for all seven years of the iPhD programme shall be identical to those applicable to Ph.D. students (see Ph.D. manual).

#### **PROVISIONS FOR AMENDMENTS**

Notwithstanding anything contained in this manual, the Senate of the Indian Institute of Science Education and Research Berhampur reserves the right to modify/amend without notices the curricula, requirements, and rules pertaining to its Integrated Ph.D. programme, including the department-specific guidelines in Annexure III.

#### **ANNEXURE I**

#### OFFICE OF STUDENTS' AFFAIRS: RULES & REGULATIONS

The Office of Students' Affairs, headed by the Dean-in-Charge/Dean, Student Affairs (COSA), carries out the management of all matters related to the student community, such as student activities, hostels, mess facility, security, transportation, counselling, and medical facilities. The Office is also concerned with the general well-being of students and the quality of their campus life.

#### 1. IISER Berhampur Hostels

IISER Berhampur is a residential institute and it mandates that all the students registered for a degree programme in the Institute reside on campus. Currently, IISER Berhampur provides three boys' hostels and two girls' hostels for BS-MS students. Two of the boys' hostels are within Riverdale and White House apartments which are located in the Rajib Nagar area, immediately behind the institute building. Other boys' hostels are at Shiv Padma Habitats, in the nearby Bharat Vihar area; Gajapati Nagar Hostel, in Gajapati Nagar, 8<sup>th</sup> lane; and Hillpatna Hostel near Nehru park. The girls' hostel is provided inside the Govt. Polytechnic Girls' Hostel premises, which is opposite the Institute, and Ananya Angan apartments near Riverdale and Girl Road Hostel, in Bijipur. The hostels are equipped with the mess and other necessary facilities.

The following rules need to be followed in all IISER Berhampur hostels in addition to the Rules of Conduct listed in the UG Manual. Necessary action will be initiated against those who are found in violation of any of these rules.

#### 2. Hostel Rules and Regulations

- 1) Students are expected to maintain discipline and decorum in the hostels.
- 2) Boys are not allowed in Girls' Hostels at any time. Likewise, girls are not allowed in the Boys' Hostels at any time.
- 3) Students must return to the hostels by 12:30 a.m. and are not allowed to leave the hostels before 5:00 a.m. These timings may be changed if found necessary for maintaining discipline. Occasionally, if the hostel resident expects to be late beyond the stipulated time, she/he should obtain a late night pass in advance from the warden In-charge and this pass must be produced to the security guard on returning to the hostel before signing the late register. Students who wish to stay outside the hostel during weekends, holidays or any other time, need to get prior approval of the Warden In-charge.
- 4) Students are required to carry their institute ID cards at all times in the compound of the hostels and produce it on demand by the hostel authorities.
- 5) Ragging, hazing, bullying, sexual harassment and sexual abuse of any kind are very serious offences. Students are warned that involvement in such activities might lead to total rustication.
- 6) Smoking or use of tobacco products in the hostels is strictly prohibited.
- 7) Students are allowed to practise their own religious beliefs only within their allotted hostel rooms, without causing any inconvenience to other hostel residents. The organisation or the practice of unauthorised religious activities in any other place within the hostel premises is strictly prohibited.
- 8) Possession, distribution, and the consumption of alcoholic beverages and illicit drugs in the hostels is strictly prohibited. Also, entering the hostel premises or boarding institute transportation in an intoxicated state is prohibited.
- 9) Students are not allowed to use motor vehicles (motorbike, scooter, car, etc.) inside the Institute campus.
- 10) Vandalism (or the wilful destruction or defacement of Institute property) is a very serious offence. This includes acts such as pasting of posters, writings, wall chalking, slogans of any kind, etc. Strong action will be taken against hostel residents found guilty of committing such an offence. Any damage to the hostel property must be reported immediately to the warden/caretaker. Hostel residents will be charged for all damages except damages caused by normal wear and tear.
- 11) Playing outdoor games like cricket, soccer, *etc.* inside the hostels is strictly prohibited. However, indoor games like TT, carom, and badminton can be played, but only in the designated areas.

- 12) The hostel authorities reserve the right to make spot checks on the hostels and rooms without having to give prior notice to the students. Students are expected to cooperate with the authorities in this regard. Students must sign FIRs when approached by caretakers/guards for violating hostel rules. Though students have the choice of disagreeing with the charges, they do not have a choice with regard to signing the FIR.
- 13) The medical staff and the counsellor will do routine medical tests and psychographic profiling of students. These tests are mandatory and all students must get these done within the stipulated time.
- 14) The hostel authorities reserve the right to move hostel residents to other hostel units if necessary. Students are not allowed to change hostel rooms without prior approval of the warden In-charge.
- 15) Each student in the hostel also assumes the responsibility of the proper upkeep of her/hisroom and the hostel premises. Students should record any complaints/issues regarding hostel maintenance (without any delay) in the hostel complaint register. It is the duty of the hostel management to address these issues as soon as possible. If maintenance issues remain unaddressed even after repeated complaints, students should report it to the warden In-charge or the COSA. In order to facilitate timely maintenance work, service personnel might have to enter rooms whenever necessary under the directive of the warden In-charge/caretaker. However, every effort will be made to respect the privacy and dignity of the students.
- 16) Hostel residents are advised to lock all doors before leaving their rooms, for security reasons. Students should take care of their own belongings. The hostel management will not be responsible for any loss/damage of the personal property of students.
- 17) If students find their roommate/neighbours missing for more than 24 hours for no verifiable reason, it is both mandatory and the moral responsibility of the students to report it to the warden In-charge immediately. This will enable the hostel authorities to take immediate action if any untoward incident would have taken place.
- 18) In the event of an accident or any other emergency situations, the warden must be informed immediately. Action can be taken against students for withholding such important information from the authorities.
- 19) Due consideration must be accorded to other hostel residents as well as residents of the surrounding areas at all times. Noise level must be kept low to allow others the opportunity to study or sleep in comfort. Playing any kind of loud music or making disturbing noises between 11 PM and 7 AM is strictly prohibited.
- 20) All fans, lights and electrical appliances must be switched off when not in use. Students should also conserve water by closing any dripping or open taps/showers when not in use.
- 21) Cooking equipment of any kind and electrical appliances such as air coolers, microwaves, induction cooktops, toasters, coffee/tea makers, rice cookers, etc. are prohibited. Also, heat generating appliances like irons, immersion rods, etc. are strictly prohibited, as these are serious fire hazards. In general, students are expected to exercise caution while using materials such as candles, incense sticks, dhoop, diya, etc., which are potential fire hazards. Students will be held responsible for any damage caused to the hostel due to the irresponsible usage of such materials.
- 22) The use of materials held by copyright, such as software, movies, music, books, journals, *etc.* is very serious offence and is punishable under law. All students are strongly advised against any form of copyright infringement inside campus.
- 23) The Hostel Management/Institute is not responsible for arrangement of any form of transportation for students (particularly to/from the airport/railway station), unless it is an emergency situation. Students requiring transportation should make arrangements independently.

#### 3. Student Counselling Services

IISER Berhampur provides psychological and professional counselling services to students as well as consultation to faculty and staff. Our clinical services include evaluation, time limited psychotherapy, referrals and medication management. In addition to individual appointments, we offer outreach programmes on topics such as stress reduction, time management, study skills and cultural adjustment.

Please note that it is mandatory for all new students to submit the psychographic Student Information provided during registration.

#### 4. IISER Berhampur Student Mess

Each IISER Berhampur hostel has an associated mess facility, which is controlled by a student body called as the Student Cooperative Mess Management (SCMM) Committee. This committee has student representatives from all the batches of students staying in the hostel and a Mess Faculty Advisor (MFA) to supervise the decisions of the committee.

The hostel residents elect the mess committees for various hostels democratically at the beginning of each academic year.

#### **Code of conduct for IISER Berhampur mess**

- This code of conduct pertains to the responsible usage of the mess facilities inside the institute's premises by all its individuals. Appropriate action will be initiated against all individuals upon violation of any component of this code.
- Since the mess facility is a part of the student hostel, all users should strictly adhere to the hostel rules and regulations.
- All students residing in hostels must register as regular boarders to the associated mess facility.
- The mess facilities are made available only to the registered boarders and valid guests, which includes institute community members with valid ID cards and guests accompanying them (up to 3 per member). In case of larger parties (up to 10 guests), a booking request may be made with the SCMM Committee a day in advance, but the committee reserves the right to turn down the request if not viable.
- There is an upper limit on the number of valid guest users who can dine in the mess facility during any meal decided by the SCMM Committee. The mess staff reserve the right to turn down additional users in accordance with this limit.
- Coupons for valid guest users will be available for purchase (at rates prescribed by the SCMM Committee) at the entrance to the mess facility only during the meal. Coupons will not be available for purchase in advance.
- The timings of the mess facility should be respected.
- Sharing of food inside the mess facility is strictly prohibited.
- Inordinate wastage of food items at the mess facility is a punishable offence.
- Taking utensils outside the mess facility is not permitted.
- An orderly queue has to be formed while waiting for food to be served or for the water filter, and also while putting away used utensils.
- Keeping used glasses on top of either the water filters, water-coolers, or any other place other than the disposal tub, is strictly prohibited.
- The food provided by the facility is only for consumption within the premises of the mess. The
  usage of lunchboxes/tiffin boxes to take food from the mess is strictly restricted to registered
  boarders who are sick.
- Negotiations, confrontations, or arguments with the mess staff should be avoided in all situations. Any issues regarding the mess must be brought to the attention of the SCMM Committee.
- A feedback register is available at the mess hall. Students are requested to record their complaints on the register.
- With the exception of mess committee members, the mess faculty advisor, and the wardens, no other mess users are allowed to enter the mess kitchen.
- Mess users are prohibited from keeping their bags, handbags, satchels, or any other personal belongings on the mess tables.
- Entering the mess with lab-coats or other protective lab gear is strictly prohibited.

#### 5. Policy Against Sexual Harassment

The Supreme Court guidelines define sexual harassment to include:

- Physical contact and advances
- Demand or request for sexual favours

- Sexually coloured remarks
- Display of pornography
- Any other unwelcome physical, verbal or non-verbal conduct of a sexual nature

#### Sexual Harassment takes place, if a person:

- subjects another person to an unwelcome act of physical intimacy, like grabbing, brushing, touching, pinching, etc.
- makes an unwelcome demand or request (whether directly or by implication) for sexual favours from another person, and further makes it a condition for employment/payment of wages/increment/ promotion, etc.
- makes an unwelcome remark with sexual connotations, like sexually explicit compliments/cracking loud jokes with sexual connotations/making sexist remarks, etc.
- shows a person any sexually explicit visual material, in the form of pictures/cartoons/pinups/calendars/screen savers on computers/any offensive written material/pornographic e-mails, etc.
- engages in any other unwelcome conduct of a sexual nature, which could be verbal, or even nonverbal, like staring to make the other person uncomfortable, making offensive gestures, kissing sounds, etc.

Often such behaviour goes unpunished because of hesitation on the part of victim to report such behaviour owing to a sense of shame or fear or both. To protest against any such behaviour that a person feels to be unwanted and unacceptable is important. The Complaint Cell at IISER Berhampur has been set up with the aim of providing a platform to complain about any unwelcome behaviour.

The present members of the Complaint Cell are:

- Director's nominee (Convener)
- Dean, Academic Affairs (Member)
- Dean, Students' Affairs (Member)
- Dean, Faculty Affairs (Member)

If you are being harassed, this is what you can do:

- Don't feel a sense of shame. Tell the harasser very clearly that you find her/his behaviour offensive.
- Don't ignore the harassment in the hope that it will stop on its own. Come forward and complain.
- Talk about the harassment to somebody you trust. It will not only give you strength but also help others in similar situations to come forward and complain.
- Keep a record of all incidents of sexual harassment in a notebook. If you feel the need to register
  a formal complaint later, this record will be helpful.

#### The Role of the Complaint Cell:

- To act as Enquiry Authority on a complaint of sexual harassment.
- To ensure that victims and witnesses are not victimized or discriminated because of their complaint.
- To take proactive measures towards sensitization of the staff, students and faculty members of the Institute on gender issues.

## RULES GOVERNING CONDUCT AND MAINTENANCE OF DISCIPLINE BY STUDENTS/RESEARCH SCHOLARS

#### 1.Definition

For the purpose of these rules, unless there is anything repugnant in the subject or context

- 1.1 'Authority' means the Director, the Dean, Heads of Department, Teachers and Officers and all other similar authorities of the Institute.
- 1.2 'Director' means the Director of the Institute.
- 1.3 'Officer' includes Registrar, Deputy Registrar, Assistant Registrar, Security Officer, Warden and such others as may be notified to be officers.
- 1.4 'Registrar' means Registrar of the Institute.
- 1.5 'Institute' means the Indian Institute of Science Education and Research Berhampur.
- 1.6 'Student' means a student undergoing a course of study and/or research at the Institute and includes a candidate for any examination of the Institute.
- 1.7 '**Teacher**' means a Professor, Associate Professor, Assistant Professor or similar authorities of the Institute.

#### 2. Conduct

- 2.1 Every student shall at all times maintain absolute integrity and devotion to studies and research and conduct her/him -self in a manner conducive to the best interest of the Institute. She/he shall not commit any act which is unbecoming of her/him or is detrimental to the interest of the Institute.
- 2.2 She/he shall conform to and abide by the provisions of the rules made by the Institute from time to time
- 2.3 She/he shall comply with and abide by all lawful orders which may be issued to her/him from time to time during the course of her/his studies and research by the Institute or by any person or persons to whom she/he may be reporting in her/his department.

#### 3. Recognition of Exemplary Conduct

- 3.1 A teacher or officer of the Institute may at any time make a confidential report to the Director about an act of exemplary good conduct by a student which in her/his opinion deserves recognition.
- 3.2 Other recommendation for recognition of exemplary good conduct shall be considered by the Director or any other authority constituted for this purpose. If it is established that the conduct deserves a recognition, the student may be awarded certificate of exemplary conduct with or without monetary reward.
- 3.3 The report recommending recognition shall precisely state the facts of the case and the reasons for the recommendation.
- 3.4 The certificate shall precisely describe the conduct for which it is issued.
- 3.5 Save in exceptional cases, for stated reasons the Director/Authority shall grant a certificate of exemplary conduct only if the performance and conduct of the student are otherwise satisfactory.
- 3.6 Any certificate granted as aforesaid may be withdrawn for sufficient cause, but only after giving recipient an opportunity to be heard.

#### 4. Acts of Indiscipline

An act of indiscipline includes:

- 4.1 An act punishable under any law for the time being enforced;
- 4.2 Willful disobedience (whether or not in combination with others) of any lawful and reasonable instructions of her/his faculty, willful negligence, commission of any act, subversive of discipline or good behaviour.
- 4.3 Misconduct (including ragging) or an act which violates any rule of discipline or any other provision of the rules and regulations of the Institute.

- 4.4 Fraud/theft/bribery/dishonesty or acting under outside influence in connection with research and studies or damaging the property of the Institute or the property entrusted to the Institute or to another student.
- 4.5 Unauthorized custody and/or use of the Institute's equipment, tools, hostel or any other property of the Institute.
- 4.6 An act in breach of agreement or undertaking or direction or failure or refusal to obey instruction or direction of any authority.
- 4.7 Resorting to organised absence of classes, tests or examinations and/or other compulsory activities of the Institute.
- 4.8 Absence without leave or any overstaying of the sanctioned leave for more than seven consecutive days without sufficient grounds or satisfactory explanation.
- 4.9 Falsification of Institute record, impersonation, or forgery.
- 4.10 Furnishing at the time of admission or thereafter wrong or incomplete information or suppressing any information, including dismissal, removal or rustication by previous Institution/University, or any punishment by any court of Law.
- 4.11 Conviction by Court of Law for any criminal offence involving moral turpitude or conviction by Court of Law for a serious criminal offence.
- 4.12 Willful slowing down in performance of research and studies or abetment or instigation thereof.
- 4.13 Smoking or consumption of intoxicating drinks within the premises of the Institute or at a public place.
- 4.14 Making representations of persons or bodies outside the Institute whether official or otherwise on matters connected with the affairs of Institute or personal grievances against the management of the Institute.
- 4.15 Making direct representation or sending grievance petitions to the members of the Board of Governors except through proper channel.
- 4.16 Non-payment of Institute and other dues including Mess & Cafeteria charges.
- 4.17 An act which interferes with personal liberty of others or subjects others to indignity or involves physical violence or use of abusive language.
- 4.18 Collection of funds for any student programme, project, or activity without the permission of the appropriate authority.
- 4.19 Organizing a procession or meeting without the permission of the appropriate authority or participation therein.
- 4.20 Use of agitational means, including strikes, picketing, gheraos, fast, arousal of the sentiments of the students' body and the public or use of any outside agency for redressal of grievances.
- 4.21 Destruction or defacing of Institute property and breaking into any Institute building or premises.
- 4.22 An act which disrupts the running of the Institute or the environment conducive to pursuit of knowledge or the harmonious relationship between different people living in the Institute campus.
- 4.23 An act which brings the Institute (and its teachers, officers or authorities) into disrepute.
- 4.24 Refusal to give evidence or establish or reveal identity when required.
- 4.25 Proxy registering of attendance or abetting the act of registering the attendance of another student.
- 4.26 Spread or break or encouragement of casteism, regionalism, communalism or untouchability.
- 4.27 Refusal to accept and acknowledge charge-sheet, orders, or any other communication addressed to students.
- 4.28 Habitual late arrival or early departure or irregular attendance.
- 4.29 Indulging in an act of sexual harassment within or outside the Institute.
- 4.30 Such other acts as may be notified by the authorities from time to time.

#### 5. Disciplinary Action

Disciplinary action may comprise one or more of the following categories:

#### 5.1 Category - 1

5.1.1 An order rusticating a student for stated period under intimation to other universities/institutions in India.

- 5.1.2 An order expelling a student from the Institute whether for all time to come or for a stated period under intimation to other universities/institutions in India.
- 5.1.3 An order suspending a student for a period exceeding 15 days either from all activities of the Institute, departments or hostels or only from specified activities.
- 5.1.4 An order directing a student to pay a fine exceeding ₹ 5000/-(Rupees Five thousand only)

#### **Explanation**

'Rustication' means debarring the student from studying in any university or college or educational institution.

'Expulsion' means debarring a student from studying in the institute.

#### 5.2 Category - II

- 5.2.1 An order suspending a student for a period not exceeding 15 days either from all activities of the Institute, department or hostel or from specified activities.
- 5.2.2 An order directing a student to pay a fine of/or exceeding ₹ 5000/-(Rupees five thousand only)
- 5.2.3 An order directing entry of adverse remarks in the character roll of the student.

#### 5.3 Category - III

- 5.3.1 An order directing a student to vacate the premises and prohibiting her/him from re-entering the same for period not exceeding three days.
- 5.3.2 An order directing a student to cease and desist from indulging in any act of indiscipline.
- 5.3.3 An order warning a student.

#### 6. Disciplinary Authority

The Director is empowered to take any disciplinary action against any student in respect of any act of indiscipline, whether committed within the campus or elsewhere.

#### Department-specific guidelines and credit distribution

#### I. DEPARTMENT OF BIOLOGICAL SCIENCES

The Integrated Ph.D. programme in the Department of Biological Sciences follows the general guidelines and rules outlined in the iPhD manual issued by the Office of Academic Affairs. This document makes the department-specific rules, including the semester-wise credit distributions explicit. **The following guidelines are to be read in conjunction with the general guidelines of the iPhD programme.** 

#### A. Department-specific guidelines:

- 1. Credit distribution: The table below shows the credit distribution, minimum credit requirement, and maximum credit allowed per semester.
- 2. Lab rotations: Towards the end of II<sup>nd</sup> semester DPGC will prepare a roster in consultation with students and PIs. The credit evaluation will be done by the respective PI with the guidance of DPGC.
- 3. Comprehensive Examination: The comprehensive examination will have a written & oral component (conducted in the 1<sup>st</sup> week of July). Details: refer iPhD manual.
- 4. After the successful completion of the comprehensive examination thesis supervisor (TS) will be assigned based on mutual consent. TS should immediately form a Research Progress Committee to review the progress of the student (Further details refer iPhD manual).
- 5. Mandatory Ph.D. courses: A technical writing & communication skills course, Error analysis course/Biostatistics, and a seminar course have to be completed by the student within the X<sup>th</sup> semester with a satisfactory (S) grade. Additional courses can be Audited by the students with the consent of TS.
- 6. Students who are enrolled for the Exit option with an MS degree will have a minimum credit requirement = 138 credits, including S grade in all research projects. Each research semester (V<sup>th</sup> & VI<sup>th</sup>) will be graded and carry 19 credits each. Such students will have to submit a thesis based on the work done during this one year. Grading and assessment will be done following the general iPhD programme guidelines issued by the office of academic affairs.
- 7. If a student wants to leave the program after the 3<sup>rd</sup> year (i.e., in 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> or 7<sup>th</sup> year) without a PhD degree, the student needs to submit a thesis.

#### **B. Semester wise Timeline**

			Credit distribution				
Phase	Semester	Year	Theory courses Lab courses Research project			Total credits	Max credit
	I	1	Minimum 4 lecture courses (4×4 =16 credits)	1 lab course $(1\times3 = 3 \text{ credits})$	0	19	24
	П	1	Minimum 4 lecture courses (4×4 =16 credits)	1 lab course $(1\times3 = 3 \text{ credits})$	0	19	24
es e	Sur	nmer 1	: Lab rotation (1.5 months) 2	credits - (S/X grad	e only)	2	
MS phase	Ш	2	Minimum 4 lecture courses (4×4 =16 credits)	1 lab course $(1\times3 = 3 \text{ credits})$	Two lab rotations (2 months each) 2×2= 4 credits	23	28
	IV		Minimum 4 lecture courses (4×4 =16 credits)	1 lab course $(1\times3 = 3 \text{ credits})$	Research project (4 credit)	23	28
	(Can be a	continu	Summer 2: Research project ation of the IV <sup>th</sup> semester research project) - (S/X grade only)				
			Comprehensive Examination (Min. credit req = 90 & S grade in all research projects)				
	V	3	Mandatory PhD courses (S/X grade)	0	19 End semester presentation & assessment	19	24
	VI	3	Mandatory PhD courses (S/X grade)	0	19 End semester presentation & assessment	19	24
	VII	4		Research work			
e	VIII	4	(Graduate semina	r and APS as per th	e iPhD manual)	)	
phas			JI	RF to SRF seminar			
PhD phase	IX	5	At the end of X <sup>th</sup> semester student will be asked to give 2 <sup>nd</sup> APS (PhD Manual Guideline #8.6) and every year thereafter till synopsis				
	X	3	submission.	and every year ther	earter till synop	7818	
	XI	6	1. Prior to submission of PhD thesis and synopsis, a comprehensi				
	XII	U	synopsis seminar	internal assessment of the research work is made in the presynopsis seminar			
	XIII		1. Prior to submission of PhD thesis and synopsis, a comprehensive internal assessment of the research work is made in the presynopsis seminar  2. Submission of Synopsis and Constitution of the Ph.D. Thesis Evaluation Board				
	XIV	7	<ul><li>3. Ph.D. Thesis Evalua</li><li>4. Ph.D. defense open</li><li>5. Submission of Final</li></ul>	seminar			

#### **II. DEPARTMENT OF CHEMICAL SCIENCES**

Semester	Course credit(s)	Semester-long Research Project (s)/(Credits)	Total credits (Min/Max)		
1 <sup>st</sup>	Five theory courses (5 x 4)  [Three compulsory + Two elective courses] + one lab course (3)	Zero	23/23		
2 <sup>nd</sup>	Five theory courses (5 x 4)  [Three compulsory + Two elective courses] + one lab course (3)	Zero	23/23		
	search project (minimum of 12 ho	urs per week)	3		
3 <sup>rd</sup>	Four theory courses (4 x 4)  [Three compulsory + one elective courses] + one lab course (3)	one (4)	23/27		
4 <sup>th</sup>	Four theory courses (4 x 4)  [Three compulsory + one elective courses]	Two (4 x 2)	24/28		
Summer re	search project (minimum of 12 hou	urs per week)	3		
I otal mano	datory credits for a comprehensive	examination	95 [not more than one unsatisfactory (x) grade in the research project]  Credits from Lecture courses = 81  Credits from Research Projects = 14		
Comprehe	nsive Exam (time frame as per t	he iPhD manual)			
5 <sup>th</sup> & 6 <sup>th</sup>	Students who discontinue after t go through post master thesis/ r 2 = 36)	hree years, have to	Total credits should be gained = 131 credits		
5 <sup>th</sup> & 8 <sup>th</sup>	(as per the institute guidelines), and are exempted from regular Ph.D. course works, however, they have to opt for mandatory courses, <i>i.e.</i> -Seminar Course, Error Analysis, Technical Writing & Communication Skill (with satisfactory 'S' grade) [*As per the Department-specific guidelines for the Ph.D. program].				
b) Gra	mation of Research Progress Cor aduate seminar and Annual Progre C meeting for the promotion of JR nual APS/ RPC meeting (every ye	ess Seminar (APS) (a F to SRF (as per the	is per the iPhD manual) iPhD manual)		

9 <sup>th</sup> & 14 <sup>th</sup>	a) Pre-synopsis seminar: Prior to submission of the Ph.D. thesis and
	synopsis, a comprehensive internal assessment of the research work is
	made in the pre-synopsis seminar.
	b) Ph.D. students must have one research article published/accepted in any
	peer-reviewed journal at the time of thesis submission.
	c) Constitution of the Ph.D. Thesis Committee and submission of Ph.D.
	thesis synopsis and (as per the iPhD manual)
	d) Ph.D. Thesis Evaluation (as per the iPhD manual)
	e) Ph.D. Defense (as per the iPhD manual)
	f) Submission of the final thesis (as per the iPhD manual)

#### **Guidelines fo the Research Projects**

- a) Among the four research projects during the first four semesters, students can opt to choose the maximum of two research projects under one Principal Investigator (PI). However, students are allowed to choose any PI in the department with mutual consent for the final summer research project (at the end of the 4th semester).
- b) Students shall be allowed to conduct one research project (out of all the research projects) from another institute if recommended by the DPGC/HOD (as per iPhD manual).
- c) Students can also register for one extra research project during the summer to clear the unsatisfactory grade obtained in the previous semester research project.
- d) Students shall be allowed to take one extra theory course (elective) of 4 credits as overload in their 3rd and 4th semesters. The course overload criteria will be applied after this extra course (as per the iPhD manual).

#### **Comprehensive Examination Policy**

- a) The constitution of the comprehensive examination committee and evaluation processes should be followed as per the institute guidelines.
- b) The comprehensive examination includes the following.
  - i) Written Exam: Written exam is based on the completed course work done during the first four semesters (50 % weightage).
  - ii) Seminar presentation followed by *viva voce*: Seminar and *viva voce is* based on the courses and research projects completed during the last four semesters (50 % weightage).

#### III. DEPARTMENT OF MATHEMATICAL SCIENCES

Refer to the Integrated PhD Manual for Institute-wise guidelines for the Integrated Ph.D. programme. This document consists of guidelines specific to the Mathematics department.

#### 1. Introduction

The Integrated Ph.D. programme in Mathematics at IISER Berhampur aims to rigorously train and guide students in the various ongoing research areas in the Department of Mathematical Sciences.

#### 2. Programme structure

The Integrated Ph.D. programme consists of two main components: coursework and research leading to a thesis. The majority of the course work is done in the first two years of the programme. While the majority of research component is after the second year, students are expected to explore their interest among the available areas of research available in the Department. At the time of joining, each student will be assigned a faculty advisor suggested by the DPGC (Departmental Post graduate Committee) on a rolling basis and approved by HoD/FIC.

#### **Role of the Faculty Advisor:**

- The faculty advisor will determine the preparedness of the student for completing the
  requisite coursework and obtain the required number of credits (see **Timeline**). In case a
  student is found to be deficient in one or more areas, the mentor may recommend
  additional courses that need to be audited. The audited courses will not appear on the
  transcript/grade sheet.
- The faculty advisor will help the students to choose a mentor for summer research (Section 4) at the end of the second semester and the fourth semester.

At the end of the first year, the students are required to choose the interested areas of research in order to complete two reading courses with two different faculties in the third and the fourth semesters.

The students with CPI from 6 to 6.49 will be involuntarily asked to exit with a MS degree. (Please refer to the Section 5) and students with CPI < 6 will have to refer to the details on termination or a buffer semester in the institute manual. The students with minimum CPI 6.5 are qualified for the Comprehensive examinations (see Section 3). It is recommended that the exit option may be chosen voluntarily or involuntarily at this stage.

The student is expected to choose a thesis supervisor after the successful comprehensive examinations and complete the registration of the PhD. A mentor will be assigned to the student when the student is voluntarily or involuntarily choosing the Exit option (see Section 5).

#### **Role of the Mentor/Thesis Supervisor:**

(The word 'supervisor' below refers to either the mentor assigned for the Ms Thesis supervision or the PhD Thesis supervisor whichever case applicable)

- In the beginning of the 5<sup>th</sup> semester DPGC together with the supervisor will form a committee (MS thesis review committee) who will review and assess the Ms Thesis. This committee with the endorsement of the HoD and approved by DoAA, will consist of the PI and at least two other members one nominated by the DPGC and at least one member nominated by the PI. (can also be the same as RPC in case of the students registered for the PhD and in this case the inclusion of external is optional in the assessment of the MS Thesis)
- The supervisor may suggest reading courses and additional department electives for advanced study in the fifth and sixth semesters along with the MS thesis to be completed by 6<sup>th</sup> semester.

At the end of the 4<sup>th</sup> year, the student should complete the viva-voce/graduate seminar required for JRF-SRF extension (please refer to the institute manual for the details). The student continues the programme by doing research under the assigned Thesis Supervisor following as per the Institute PhD guidelines.

#### 3. Comprehensive Examinations

The departmental Integrated Ph.D. Comprehensive Examination Committee (iCEC) will consist of a minimum of three members that will look after the Comprehensive examination of all iPhD students within a department. It will be constituted by the convener of DPGC with the endorsement of the HoD and finally approved by DoAA. iCEC may be chaired by the Convener, DPGC, or HoD. iCEC will conduct and evaluate the comprehensive examinations. The student must clear the comprehensive examinations before the 5<sup>th</sup> semester. The comprehensive examination consists of two components: written and oral.

Written Examination: A student is eligible to appear for the written examination only after she/he completes the course requirements, that is, completion of <u>80 credits</u> with the minimum <u>6.5 CPI</u>. The syllabus of this examination will be based on the course work done by the students till the 4<sup>th</sup> semester. The grades for the written exam will be pass or fail (P/F). The student will be given at most two attempts with the second attempt to be done within 3 weeks since the first attempt.

**Oral Examination:** The oral examination is a question-answer session with the iCEC members with a presentation (as detailed by iCEC).

The syllabus will be based on the courses undertaken and the presentation should be based on the reading courses. This exam cannot be taken unless the student has passed the written section. The oral exam must be scheduled within two weeks from the written comprehensive examination subject to the convenience of the committee. The grades for the oral examination will be satisfactory or unsatisfactory (S/U). The student will be given at most two attempts with the second attempt to be done within 3 weeks since the first attempt.

**Results:** Either in the case of F (fail) grade in the written section after two attempts or in the case of U (unsatisfactory) grade for oral examination even after the 2<sup>nd</sup> attempt, the student will be recommended for the compulsory Exit option. The students with satisfactory grade will complete the registration for the PhD.

A student is officially admitted to candidacy for Ph.D. after the successful completion of written and oral comprehensive examinations.

#### 4. Summer Research

The students are highly encouraged to visit a premier institute to do a summer project/reading course and/or attend the summer school/programs during the first summer break (between the first and the second year) with the approval of the faculty advisor. The faculty advisor will monitor the student's work and will grade S/U, that is, Satisfactory or unsatisfactory (form to be created to detail the work done- a summer work report by the student and then grades by the faculty advisor). Obtaining an S grade is mandatory to continue the course.

#### 5. Exit Option

Candidates enrolled in the iPhD programme will have an option of exiting the programme with an MS degree. This is referred to as the Exit option.

#### A. Involuntary exit:

A student who has (a) appeared in the comprehensive examination (CE) but has failed to clear the CE even after the second attempt, or (b) not qualified for the CE for low CPI, or (c) opted for the Buffer semester (see section 7.6.1) at the end of the second year and recovered a suitable CPI to be eligible for an Exit option, will be recommended for a compulsory exit.

#### B. Voluntary exit:

A student can voluntarily opt for the Exit at the time of the CE or afterward.

In case of both A and B, apart from the guidelines mentioned in the institute manual, the following requirements have to be met in order to be eligible for an Exit with an MS degree in the Department of Mathematical Sciences:

• The minimum number of credits to be obtained in the third year is 42, that is, altogether 122 credits and there should not be a U grade in any of the reading courses MTH 699 and MTH 698 to be qualified for the MS degree.

#### 6. Annual Progress Report

Following successful completion of comprehensive exam requirements, each student is required to submit a yearly report of progress towards the thesis. This report must be submitted to the RPC with a copy to Convener, DPGC (please refer to the institute manual for the details).

## Department-Specific Timeline - Integrated PhD in Mathematics

Assignment	of Faculty advisor		
Semester	Course Code	Course Title	Credits
	MTH 301	Group Theory	4
	MTH 303	Real Analysis-I	4
	MTH 305	Elementary Number Theory	4
1	MTH 311	Advanced Linear Algebra	4
	MTH 407	Complex Analysis-I	4
Minimum CF	Pl required: 6		•
	MTH 302	Rings and Modules	4
	MTH 304	Metric Spaces and Topology	4
	MTH306	Ordinary Differential Equations	4
2	MTH 403	Real Analysis - II	4
	MTH*	Department Elective	4
Summer res Minimum CF	earch (Section 4);	Re-Examinations	
	MTH 401	Fields & Galois Theory	4
	MTH 404	Measure & Integration	4
	MTH 405	Partial Differential Equations	4
3	MTH*	Department Elective	4
	MTH 598	Reading Course (acc to BsMs, this is course credit)	4
Minimum CF	Pl required: 6	,	
	MTH 503	Functional Analysis	4
	MTH*	Department Elective	4
	MTH*	Department Elective	4
4	MTH*	Department Elective	4
	MTH 599	Reading Course (acc to BsMs, this is course credit)	4
	earch; Re-Examina	ations appearing in Comprehensive examination: 6.5	
	r of credits to be of		
Comprehens	sive Examination(S	ection 3)	
Exit option (		able; assignment of Thesis Supervisor/Mentor	
5	MTH 698	Reading Course (research credit)	4
	MTH*	(optional) Department elective(s)	
	MS Thesis		1
6	MTH 699	Reading Course (research credit)	6
	MTH*	(optional) Department elective(s)	
	Submission of M		32
Total numbe (MS-Exit)	r of minimum cred	ts to be obtained:122	
JRF-SRF Ex	tension		
7-14	APS at the end of	of every year	

#### IV. DEPARTMENT OF PHYSICAL SCIENCES

		Assignment of Faculty advisor	
Semester	Course Code	Course Title	Credits
	PHY 301	Mathematical Methods I	4
	PHY 303	Quantum Mechanics I	4
	PHY 305	Classical Mechanics	4
1	PHY 311	Physics Laboratory I**	3
		Open Elective I***	3/4
		Total	18/19
	PHY 302	Mathematical Methods II	4
	PHY 304	Quantum Mechanics II	4
	PHY 306	Statistical Mechanics	4
2	PHY 308	Physics Laboratory II	3
		Open Elective II***	3/4
		Total	18/19
Summer res	search project*, Re	-examinations	
	PHY 401	Electrodynamics and Special Theory of Relativity	4
	PHY 403	Condensed Matter Physics	4
3	PHY 405	Condensed Matter Physics Laboratory	3
		Open Elective III***	4
	PHY	Research project*	3/4
	•	Total	18/19
	PHY 402	Atomic and Molecular Physics	4
	PHY 404	Nuclear and Particle Physics	4
4	PHY 406	Nuclear Laboratory	3
4		Open Elective IV***	3/4
	PHY	Research project*	4
		Total	18/19
	search project*; R	be obtained till now: 72 e-Examinations; Comprehensive Examination;	Assignment of
	PHY	Open Elective V***	4
E	PHY	Open Elective VI***	4
5	PHY	Open Elective VII***	4
	PHY	Research project*	8
	•	Total	20
	PHY	Open Elective VII***	4
	PHY	Open Elective VII***	4
6	PHY	Open Elective VII***	4
	PHY	Research project*	8

	Submission of MS Thesis		
	Total	20	)
Total number of minimum credits to be obtained: 72+40 = 112			
JRF-SRF Extension			
7-12/14	Annual Progress Seminar at the end of every year		

<sup>\*</sup> At least one research project should be on experimental physics and at least one research project should be on theoretical physics.

- \*\* For the current 2020-21 first semester, Physics Laboratory I will be replaced by the course on numerical methods (PHY 312).
- \*\*\* At least 6 of the electives should be from the Department of Physical Sciences.

#### **Department-Specific Guidelines**

Refer to the Integrated PhD Manual for Institute-wide guidelines for the Integrated Ph.D. programme. This document consists of guidelines specific to the Physics department.

#### 1. Introduction

The Integrated Ph.D. programme in Physical Sciences at IISER Berhampur aims to rigorously train and guide students in the various areas of contemporary experimental and theoretical research being carried out in the field of Physical Sciences.

#### 2. Programme structure

The Integrated Ph.D. programme consists of two main components: coursework and research leading to a thesis. The majority of the course work is done in the first two years of the programme, while the majority of research component is carried out after the second year. Students are expected to explore their interest among the available areas of research available in the Department. At the time of joining, each student will be assigned a faculty advisor suggested by the DPGC (Departmental Post graduate Committee) and approved by HoD/FIC.

#### 2.1 Role of the Faculty Advisor:

- The faculty advisor will determine the preparedness of the student for completing the requisite coursework and obtain the required number of credits (see Timeline). In case a student is found to be deficient in one or more areas, the mentor may recommend additional courses that need to be audited. The audited courses will not appear on the transcript/grade sheet.
- The faculty advisor will help the students to choose a mentor for summer research (Section 4) at the end of the second semester.

The students are required to fill the form to choose a potential thesis supervisor in an area of mutual interest before the end examination of the fourth semester. The DPGC and the FIC will then form a Comprehensive Examination Committee (iCEC) (please refer to the institute manual) to conduct Comprehensive Examinations (Section 3).

The student is expected to choose a thesis supervisor after the successful comprehensive examinations and complete the registration of the PhD. A mentor will be assigned to the student by the CEC and the DPGC with the approval of the FIC when one or more of the following scenario arises:

either the student was unable to find a thesis supervisor

- or the student has U grade in one of the research / reading projects
- or the student's comprehensive exams has an unsatisfactory grade
- or the student falls under the category of academic deficiency
- or the student who has passed the Comprehensive and satisfied all the other criteria, but not assigned a supervisor. In this case, the student must sign a self-declaration form that he/she will find a thesis supervisor before completion of the 6<sup>th</sup> semester.

#### 2.2 Role of the Thesis Supervisor:

- In the beginning of the 5<sup>th</sup> semester DPGC together with the supervisor will form a three-member MS-Thesis Committee.
- In case of the PhD registered student, the thesis supervisor is required to form Research Progress committee (RPC) (may be same as the MS Thesis committee) (please refer to the institute manual for the details)

The student continues the programme by doing research under the assigned Thesis Supervisor following as per the Institute PhD guidelines.

At the end of the 6th semester a student transits from JRF to SRF, following the successful completion of the Annual Progress Seminar (APS).

#### 3. Comprehensive Examinations

#### Details of the comprehensive examination:

CEC will conduct and evaluate the comprehensive examination. A student must clear the comprehensive examination before the 5<sup>th</sup> semester (as per the Institute Policy). The comprehensive examination may be only oral, or may consist of both written, as well as oral components.

A student is eligible to appear for the comprehensive examination only after she/he completes the course requirements, that is, a minimum of <u>72 credits</u> with a minimum CPI of 6.5.

The syllabus of this exam is based on the coursework and research / reading projects done by the students till the 4<sup>th</sup> semester. This examination will be conducted ideally within 2 weeks after the 4<sup>th</sup> semester End/Re-Examination (differs on the basis of case by case). The grades for the exam will be pass or fail (P/F). The student will be given at most two attempts with the second attempt to be done within 3 weeks since the first attempt.

**Results:** In the case of U (unsatisfactory) grade for the examination even after the 2<sup>nd</sup> attempt, the student will be asked to opt for the exit option, after submission of a MS thesis at the end of the 6th semester. The students with satisfactory grades will complete the registration for the PhD.

A student is officially admitted to candidacy for Ph.D. after the successful completion of the comprehensive examination.

#### 4. Annual Progress Report

Following successful completion of comprehensive exam requirements, each student is required to submit a yearly report of progress towards the thesis. This report must be submitted to the RPC with a copy to Convener, DPGC (please refer to the institute manual for the details).

\*\*\*\*\*\* End of document \*\*\*\*\*\*