INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH THIRUVANANTHAPURAM

An autonomous institution under the Ministry of Education, Government of India



GUIDE BOOK OF REGULATIONS FOR THE INTEGRATED Ph. D. PROGRAMME

2023-24 2024-25

www.iisertvm.ac.in

Introduction

Introduction



The Indian Institute of Science Education and Research Thiruvananthapuram (IISER TVM) is an esteemed autonomous institution established in 2008 under the Ministry of Education, Government of India. Dedicated to advancing scientific research and education, IISER TVM upholds international standards in these fields. The Institute offers a unique approach to learning by integrating research into undergraduate education, fostering a spirit of inquiry, and promoting interdisciplinary collaboration among students and faculty. With its commitment to excellence, IISER TVM aims to nurture the next generation of scientists and innovators.

The campus of IISER TVM is situated at Vithura, at the foothills of the Ponmudi Hills, about 40 km from Thiruvananthapuram. The campus is blessed with rich greenery, three streams, a river running through it and a spectacular mountain backdrop.

The fully residential institute provides hostel facilities and dining facilities to all the students. Apart from the mess facilities available to the residents, the students have the options to explore various multi cuisine eateries located inside the campus. The well-equipped computer laboratories and resourceful library are available for all students. The Institute Health Center is staffed with doctors and nurses, providing round the clock medical services. On campus sports facilities like football, volleyball, basketball courts and indoor stadium help to keep-up the physical and mental well

being of the students. Various student clubs like science club, cultural club, music club host programmes throughout the year making campus life vibrant and jovial.

Academics

The Indian Institute of Science Education and Research Thiruvananthapuram (IISER TVM) is an autonomous institution under the Ministry of Education, Government of India established in 2008. IISER TVM is dedicated to scientific research and science education of international standards. Traditionally, teaching has been segregated from research in undergraduate science curricula in our country. IISER TVM aims to provide high quality education in modern science, integrating research at the undergraduate level, and to develop a spirit of enquiry amongst its students cutting across disciplines by promoting interdisciplinary research.

Currently IISER TVM offers a five-year BS-MS programme in four basic sciences, namely *Biological Sciences*, *Chemical Sciences*, *Mathematical Sciences and Physical Sciences*, Integrated and Interdisciplinary (i^2 Sciences) BS-MS programs in *Biological Sciences*, *Chemical Sciences*, *Mathematical Sciences*, *Physical Sciences*, *Data Sciences* and *Earth*, *Environment and Sustainability Sciences*. The Institute also offers MSc, Integrated PhD (IPhD) and PhD programs in basic and applied sciences. These programs are offered at the six schools and two interdisciplinary research centres that form the academic core of the Institute.

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Regulations

About the programme

Integrated Ph.D. Programme is a research programme. At the end of the successful completion, Master of Science and Ph.D. degree are awarded.

The first four semesters consist of core and elective courses specialized in one subject (Biology, Chemistry, Mathematics or Physics). The third year of the programme is devoted to project work, at the end of which the candidate has to pass a comprehensive exam to continue in the program, or else one has the option to exit with an *MS by research* (Ms(Res)) degree after third year provided all the required criteria are met. Those students who stay in the programme will continue with research leading to the Ph.D degree subject to fulfilling the requirements.

Eligibility

- A Bachelor's degree in Biological Sciences/ Chemical Sciences/ Mathematical Sciences/ Physical Sciences/ Engineering/ Technology and related areas as applicable to individual Schools, under the 10+2+3/4 system.
 - Candidates seeking admission to School of Physics must have a valid score in Joint Entrance Screening Test (JEST) or JAM.
- 2. The minimum requirement for admission to the programme is 55% marks or 6.0 out of 10 CGPA in the Bachelor's degree (as declared by the University).
- 3. The minimum requirement in the qualifying degree is relaxed for SC/ST and PD candidates as per the rules of Government of India.

Selection procedure

Applications for the programme will be invited through press advertisement and announcement in the Institute's website: www.iisertvm.ac.in. Short-listed candidates who have applied for School of Biol-

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ogy, Chemistry, Physics and Mathematics will be called for a written test and/or interview(s), and further interviews/tests can be conducted on the basis of performance during the first round of interviews.

School Committee on PhD Programs

All academic and student-related activities of the IPhD or PhD program in each School are overseen by the School Committee on the PhD Program (SCPP). The SCPP comprises four faculty members of the school along with student representatives. SCPP is responsible for all academic and associated student matters, e.g. curriculum modifications, course evaluations, undergraduate teaching and research. The schoolwise list of SCPP committee members' is available at: (https://academics.iisertvm.ac.in/people/team)

All academic related students' matters should be reported to the convener of the SCPP and may be forwarded to the Academic Office with due recommendations of the SCPP.

Enrollment

The successful candidate has to register for the Integrated Ph.D. programme by producing originals of the required certificates and payment of the registration fees on the day prescribed for Registration.

Duration of the Programme

- 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.
- A 3 year MS Degree by research MS(Res) can be awarded to those students of Integrated Ph.D programme, who wish to exit the I-Ph.D programme without completing the requirements of award of Ph.D degree. The minimum duration of MS(Res) programme is 6 semesters. For details refer on section 'Exit Policy'.

Registration

- Every student must register for the courses of a semester on the first day (registration day) of the semester. The fifth and sixth semester projects of 15 credits each that are mandatory for all IPhD students be assigned the course code and name MAT/BIO/PHY/CHY 699 – MS Research. The course code assigned for the subsequent semesters is MAT/BIO/CHY/PHY 799.
- To register for a course ALL prerequisites must be successfully completed.
- Registration involves payment of the prescribed fees for the semester.
- Late semester registration fee of Rs. 250/- per day to a maximum of Rs. 1750/- for a week will be levied from the first day of the commencement of the class.
- Late registration after the first week of the semester can only be done
 with the permission of the Dean (Academics) or the Director of the
 institute.
- After 14 semesters, continuation of the course registration must have approval of the senate (see below).

Guidelines for continuation and exit

The first two years of the programme will consist of course works. The third year will be devoted to a project carrying 30 credits (15 credits per semester) for all students.

REQUIREMENTS FOR CONTINUATION

In order to continue in the IPhD program, a student has to

- 1. maintain a CGPA of 6.5 at the end of years one and two
- 2. earn grade points equivalent to a B grade or above for the average of the fifth and sixth semesters project evaluations

Candidates who complete the minimum credit requirements of the first two years with a minimum CGPA of 6.5 will continue to the third year and

¹ refer page 10, clause 2 of Essentials for Completing Courses

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be registered as Ph.D. students. Individual schools may place additional requirements for minimum credit and division of credits between theory and laboratory courses.

GUIDELINES FOR EXIT

- 1. A candidate who fails to secure a minimum CGPA of 6.5 at the end of the first year is liable to be removed from the rolls.
- 2. A candidate who fails to secure the minimum CGPA of 6.5 at the end of the second year but completes the minimum credit requirements will automatically transit to an "Exit Track" and proceed to year 3 to complete a project and will be eligible for an MS(Res) degree after successful completion of the project.*
- 3. A candidate who fails to secure the grade points equivalent to a B grade for the average of the fifth and sixth semesters project evaluations, which also serves as the comprehensive examination for continuing in the PhD program, will exit the IPhD program with MS(Res) degree provided he/she secures pass grades in both the project evaluations. A student who obtains an F grade in any of the project evaluations will be ineligible for the award of the degree. Such a student has to register in the subsequent semester and secure necessary satisfactory evaluation.
- 4. A candidate may exit the IPhD program by choice with an MS(Res) degree provided he/she satisfies the minimum credit requirements at the end of the third year. Such candidates must declare their decision to exit the program by the date the classes end in the Vasanth Semester, typically around 15th of April.

*Note: For such candidates, based on their performance in the 3rd year project, the concerned school may recommend that the student be reinstated in the IPhD program to continue with doctoral research. In such cases, the candidate must have a CGPA of 7.0 or higher after the third year. Reinstatement will be subject to the recommendation of the SCPP to the Chairman, Senate and approval by the senate.

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Fellowship

The students will be eligible for an Institute fellowship of Rs. 12,400/- per month for the first two years of the Integrated PhD programme, provided the student maintains a minimum CGPA of 6.5 at the end of the first year. All IPhD students who register for PhD after completion of the second year will be eligible for a JRF-level fellowship equivalent to that of UGC-CSIR JRF, excluding the contingency grant and HRA during the third year, provided the student maintains a CGPA of 6.5 out of 10 at the end of the second year.

Exit Track students will not receive any fellowship during the third year. Students reinstated in the IPhD program at the end of the third year will register for PhD and be eligible for the JRF fellowship as above, from the date of registration.

All students registered for the PhD degree will be eligible for upgradation to SRF-level fellowship after completing the required time period, and satisfactory research performance evaluated by the doctoral committee.

Institute fellowship of Rs 12,400/- will be paid only for a maximum of 4 semesters while the student maintains good academic standing. JRF/SRF fellowship can be availed only for a maximum of 10 semesters. It should be noted that non-drawing of fellowship due to failure to fulfil the CGPA criteria at any stage of the programme cannot be grounds for compensatory measures, such as the extension of the fellowship period.

Leave

Application for leave of absence should be submitted in the format available from the Academic Office along with necessary supporting documents e.g. medical certificate, if applicable. Leave should not usually be availed without prior permission of the Dean (Academics)/PhD Coordinator.

Semester Leave

A student can avail semester leave up to a maximum of two semesters during the entire duration of the programme, on bona fide grounds. The period of semester leave will not be counted in the prescribed time limit for

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completion of the Programme. Students will lose financial assistantship during the period of such extended leave. The leave request is to be forwarded by the research guide and Chairperson of the school (or DC) to the Dean (Academics) and is to be approved by the Director. Applications must be submitted well in advance of the date of commencement of the leave requested. IPHD being a research programme, the students are expected to be involved in the academic activities throughout the year.

Medical Leave Regulations

Students are required to inform the Academic Office, course instructors/ PhD supervisor(s) regarding long-term absences due to medical reasons (e.g. hospitalization, mental illness, etc.)

- 1. Medical certificates may be considered for exemption from attendance up to a maximum of 40% of attendance during the course work.
- Absence in mid-semester or end-semester examinations during the coursework can be exempted on medical grounds only after submission of a valid medical certificate.
- 3. In such cases, a medical certificate endorsed/issued by the Medical Officer of the Institute must be submitted to the Academic Office within one week of the missed examination.
- 4. All medical leave are subject to the approval of the Associate DoAA or DoAA.
- 5. Missed mid-semester examination: upon approval of medical leave, the instructor may give a repeat examination or pro-rate the score based on internal evaluations.
- 6. Missed end-semester examination: upon approval of medical leave, the instructor may give a repeat examination.
- 7. Students will be issued medical certificates by the Medical Officer only if they meet the criteria mentioned on the institute health center website. In case a student had to avail medical treatment outside the Health Center the same should be intimated to the Medical Officer as soon as possible, with a request for approval and for issuing a medical certificate. Details can be found on the health center website: (https://www.iisertvm.ac.in/pages/health-center)

Coursework

Faculty Adviser

Until the successful completion of the course work and comprehensive examination (details given below), every student is assigned a Faculty Adviser from the school who will guide the student in all academic and personal matters.

After the successful completion of the course work and comprehensive, the student's research guide will serve as the faculty adviser.

Assessment

Continuous assessment will be adopted for all courses. Written examination for mid semester and end semester will be conducted as per the academic curriculum for all core and elective courses. The distribution of marks out of total marks 100 will be as follows:

Core Theory Courses:

SL. No.	Type of Exam	WEIGHTAGE (%)
1	Assignments/Quiz	10 - 20
2	One Mid-Semester Examination	≥ 30
3	End-Semester Examination	≥ 50
	Total	100

For elective courses, the distribution of marks out of total marks 100 will be as follows:

Elective Courses:

SL. No.	TYPE OF EXAM	WEIGHTAGE (%)
1	Assignments/Quiz	The instructor's discretion
2	One Mid-Semester Examination	≥ 20
3	End-Semester Examination	≥ 40
	Total	100

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Practical Courses:

Practical (laboratory based) courses will be evaluated using continuous evaluation for the experiments or programming assignments with equal weightage across all. Marks will be given on completion of each experiment/assignment which will also be recorded in the laboratory note books or report of students.

Practical Courses:

SL. No.	TYPE OF EXAM	WEIGHTAGE (%)
1	Continuous Evaluation (Experiment Reports)	60 - 70
2	End-Semester Examination	30 - 40
	Total	100

Assessment 9

GRADING

Relative grading will be adopted.

(a) The letter Grade and Grade Points are as follows:

A+	10
A	9
B+	8
В	7
C+	6
C	5
D	4
F	0

In addition, there shall be two other grading symbols which can be used to indicate special status of a student in a course:

(b) Semester Grade Point Average (SGPA) is calculated as:

$$SGPA = \sum_{i} A_{i}G_{i} / \sum_{i} A_{i}$$

Where, A_i = Credit for i^{th} course; G_i = Grade point secured by the student in the i^{th} course. Summation is over all the courses credited by the student in the particular *semester*.

(c) Annual Grade Point Average (AGPA) is calculated as:

$$AGPA = \sum_{j} A_{j}G_{j} / \sum_{i} A_{j}$$

Where, A_j = Credit for j^{th} course; G_j = Grade point secured by the student in the j^{th} course. Summation is over all the courses credited by the student in the particular *academic year*.

(d) Cumulative Grade Point Average is calculated as

$$CGPA = \sum_{k} C_k G_k / \sum_{k} C_k$$

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Where, C_k = credit for k^{th} course; G_k = Grade point secured by the student in the k^{th} course. Summation is over all the courses *credited* by the student in *all the completed semesters, no course counting twice*. CGPA in the final transcript will be calculated based on all course credits completed with a Pass Grade.

Essentials for Completing Courses

- 1. Students are expected to attend all the classes. Students with overall 80% attendance or above will only be permitted to write the end semester examination. Attendance will be recorded in every class.
- 2. To register for any course a student must have completed ALL prerequisite courses (if any) with a D grade or better.
- 3. A student with an F grade in a course may be given a repeat final examination. An F grade may be improved at best to a D grade as a result of the repeat final exam.
- 4. Repeat of a course is not permitted if a student has obtained a grade D or above.
- 5. The incomplete grade I is a *transitional* grade which will be given to the students who miss the end semester examinations under exceptional circumstances (e.g. serious medical reasons) as determined by the course instructor and the relevant School Coordinator and approved by the Dean (Academics).

Make-up examination will be given to these students provided they meet 80% attendance and other academic requirements as per the rules and regulations of the institute.

The actual grade obtained after the make-up examination will be taken and will reflect in the transcript replacing the I grade. In case a student obtains an F grade in the make-up examination, he/she will be eligible to write the repeat examination.

Absence in the make-up examination will automatically lead to zero marks in that examination and the final grade in that course will be determined based on the examinations taken in that course.

If the absence of a student in an examination is not approved by the

Dean (Academics) (e.g. a deliberate attempt to skip the examination), he/she will be awarded zero marks in that particular course examination. The final grade in that course will be determined based on the other examinations of that course taken by the student.

- 6. Withdrawal of a registered course in a semester is usually permitted/enforced in very special cases, e.g. due to prolonged illness. W grade is given in these circumstances and the student is asked to repeat the concerned course with same course number taking all examinations when offered next. The new grade obtained by the student will be taken into consideration and appear in the transcript. However, the previous W grade will also appear in the transcript.
- 7. W grade will not have any effect in the calculation of SGPA, AGPA and CGPA. If a student has W grade in a registered course in a particular semester, SGPA will be calculated based on the grades obtained in other registered courses of that semester. Same rule applies to the calculation of AGPA and CGPA.
- 8. If a student does not clear a CORE course, he/she is required to repeat the course with the same course number when offered next, taking all examinations. Until the course is repeated and passed by the student, it is treated as a *backlog* in the student's records. Both the grades, the new grade and the previous F grade, will appear in the grade transcripts.
- 9. An F grade obtained in a course will contribute to the CGPA until;
 - (i) a course with the same course number is completed with a D grade or better (applicable for core courses), or
 - (ii) substituted with an alternative/same course of the respective school and completed with a D grade or better (applicable *only* for elective courses).
- 10. The student gets elevated gradually to each semester(s) by completing/attempting all the courses of previous semester(s) by registering and writing the end semester examinations as per rule and meeting other academic requirements as per guide book.
- 11. The minimum credit requirement for graduating with a PhD degree from IISER TVM will be 90 credits out of which at least 75 cred-

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its must be from MAT/BIO/CHY/PHY 799 and MAT/BIO/CHY/PHY 699.

Course Feedback

Online course feedback by students is compulsory for every course and will be taken with full confidentiality.

Re-evaluation of End Semester Examination Answer Sheets

Request for re-evaluation of answer sheets should be given by the student within 7 days of the announcement of end semester results as a written request to the Academic Office and by paying a prescribed re-evaluation fee.

Comprehensive examination

Students who are continuing in the IPhD program will be registering for the third year project credits, and are expected to work under the supervision of their prospective PhD guides during the third year. For such students, the final evaluation of the project at the end of the third year will serve as a comprehensive exam towards PhD degree.

- 1. The comprehensive examination must be passed with a grade B or better in a maximum of two attempts.
- 2. In addition to the presentation of the project work the comprehensive examination may include the following elements as well.
 - a. Presentation of a critique on a recent work of the proposed research area, given two weeks in advance.
 - b. Followed by presentation on proposed research.
 - Followed by questions by the Oral Exam Committee on the topics of the presentations and the basics of the subject matter of the courses credited.

- d. For School of Mathematics:
 - (a) & (b) refereed above to be replaced by a seminar.
 - (c) As mentioned above
- e. Weightage:
 - $\overline{\text{(a) \& (b) will}}$ have 20% weightage and (c) will have 80% weightage for all schools.

Removal from the rolls

A student will be removed from the rolls under any of the following circumstances.

- 1. Failure to maintain a minimum CGPA of 6.5 at the end of the first academic year, will lead to removal of the student from the rolls.
- 2. A second failure in the comprehensive examination will lead to exit from the IPhD programme with Ms(Res) degree.
- 3. Failure to clear any course even after repeating the same course will lead to the removal of the student from the rolls.
- 4. ALL courses must be successfully completed in four semesters and a relaxation to a maximum of six semesters may be allowed under exceptional circumstances, on approval of the Chairperson, Senate. Failure to do so will lead to the removal of the student from the rolls.
- A student may also 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.
- 6. If a student does not register for two consecutive semesters without due intimation and approved leave, the student will automatically be removed from the rolls.

In exceptional cases the Director may at his discretion override any of the above provisions.

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Sample transcript

OFFICIAL GRADE CARD

		ent: XXX ass: Integrated Ph.D. programme	Koll	Number: IPHD1XXXX	Date of Issue: xx-xxx-xx PAGE 1 of 1
		XXX has attended 2 semesters	of classes	at IISER Thiruvananthapuram	
Varsha	20XX		Credits	Grade	
CHY	311	Advanced Coordination Chemistry	3	A	
CHY	312	Quantum Chemistry	3	C+	
CHY	313	Stereochemistry : Principles and Applications	3	В	
CHY	314	Instrumental Methods	3	A	
CHY	315	Advanced Organic Chemistry Lab	3	A+	
			SGPA:	8.20	
Vasant	h 20XX				
CHY	3201	Organic Synthesis	3	B+	
CHY	321	Organometallic Chemistry	3	A	
		Advanced Molecular Spectroscopy	3	В	
		Advanced Organic Chemistry -I	3	B+	
CHY	324	Spectroscopy and Structure Determination	3	B+	
CHY	325	Advanced Chemistry laboratory-II	3	A	
			SGPA:	8.17	
		al credits completed: 33 CGPA: 8.1			

DR(Academics) Grade Card No: XXXXXXXXXX

Research work

Starting of the research work and Supervisor

After successful completion of the coursework and/or a short project during the first four semesters, each student will take-up research as part of a third year 30 credit project. Students who do not wish to exit the IPhD programme with an MS (Res) will take-up the third year project under an assigned research supervisor who is expected to continue as the supervisor for the PhD research as well.

An MoU has to be signed between the faculty/scientists from external institutions for joint co-guidance. This MoU is applicable only in those cases where the co-guidance of the student does not lead to any additional financial implications to the institute apart from regular student fellowships. Any intellectual property sharing arrangement will require a supplementary MoU signed by authorized representatives of the institute.

Doctoral Committee

Each student will have a Doctoral Committee (DC) appointed by the School/Institute. The Doctoral Committee consists of Head of the school or his nominee (Chairperson), Guide and two members of which one may be from another school or an external expert who are working in the research areas related to the proposed work of the student. The major role of the DC is to monitor the progress of the research work, of the student up to the point of the award of the Ph.D. degree.

The DC will meet at least once every semester. At the first meeting of the Committee, the student may present a rough plan of the research work to be under taken. At every subsequent meeting, the student presents the progress of his/her work. The semester-wise report of the Committee on the student's progress is mandatory at the time of the registration of the student in each semester.

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Monitoring Research Progress

1. The Doctoral Committee will make semester-wise assessment of the progress of the research work of the student and report to the Dean (Academics).

- 2. In case of continued lack of progress or initiative on the part of the student, the DC may recommend the cancellation of Fellowship or termination of the Registration.
- 3. The DC is also empowered to recommend to the Dean (Academics) any disciplinary action in case of misconduct or unethical practices.
- 4. In case of any dispute between the student and the guide, the DC may consider it and recommend suitable remedy.
- 5. On completion of two years as JRF and successful completion of comprehensive examination, the fellowship will be upgraded to SRF on the basis of assessment of Scholar's research progress/achievements through a presentation before a Committee consisting of the Supervisor, Head of the School or his nominee, DC Members and external examiner, if any, as per the rule of the funding agencies.

JRF to SRF evaluation should not be clubbed with comprehensive examination.

Research Seminars

The student has to give at least two research seminars to the department:

The first one, to be given before the end of the seventh semester, will essentially concern with the formulation of the research problem and survey of existing literature.

The second seminar, called the synopsis seminar , will discuss the major findings of the student that will go into the thesis. The synopsis seminar will be given just prior to the submission of the Thesis Synopsis to the Dean (Academics) (see below) and with the approval of the Doctoral Committee.

Both the seminars will be assessed by the Doctoral Committee and will be evaluated as *satisfactory* or *unsatisfactory*. In the latter case, a suitable course of action will be suggested by the DC.

Thesis submission

Publication requirement for the Ph.D. thesis submission

- 1. The student should have atleast one published/accepted paper, with student as a major contributor or the lead author, in a recognized research journal before he/she can submit the thesis synopsis. The paper(s) should cover atleast 1/3rd of the work reported in the thesis. In School of Chemistry for a Ph. D. student to submit a thesis, one of the following criteria should be fulfilled:
 - One first-authored paper with an impact factor above 7.0.
 - One first-authored paper + two co-authored papers with a cumulative impact factor above 9.0 (approximately).
 - One patent (primary student inventor) + two co-authored papers with a cumulative impact factor above 5.0 (approximately).
 - Review articles will not be counted for calculating the above impact factors.
 - In special and rare circumstances, the doctoral committee along
 with a departmental level committee with Head and all the professors and emeritus professors of the School can evaluate the merit of
 the student and the content of the thesis to forward the thesis if none
 of the above criteria are fulfilled.
- 2. "Recognized Journal" means it should be one of the journals in the list of journals prepared and dynamically edited by the concerned School, for this purpose taking due care to avoid all predatory journals.
- 3. A certificate from the Chairman, Doctoral Committee, stating that the points 1 and 2 above have been complied and should accompany with the submitted synopsis.

Thesis Synopsis

The thesis synopsis is a Chapter-wise summary of the thesis. This is prepared after the go ahead from the DC. Each school will specify the publication requirements the student must satisfy before submission of the

Thesis submission

synopsis. The Synopsis is presented by the student to the Committee consisting of the Dean (Academics) and the DC members. The synopsis is evaluated by this committee. The committee may propose revisions to the synopsis, in which case, it must be revised and resubmitted.

The accepted synopsis is further processed by the office of the Dean (Academics).

Thesis Examination

SELECTION OF EXAMINERS

The following steps are followed by the Dean (Academics) in processing the accepted synopsis.

- 1. A panel of two external examiners will be confidentially selected by the Director from a list of a minimum of eight possible examiners (four Indian and four Foreign examiners) suggested by the DC, at the synopsis evaluation meeting. The list should contain their contact details.
- 2. A brief profile of the panel members on their professional expertise should accompany the list of suggested examiners submitted by the thesis supervisor to office of the Dean (Academic Affairs).
- 3. The panel of examiners for thesis evaluation should be experts, with at least one expert within the country, working in the relevant filed of research and should be at the level of Associate Professor or Professor or at equivalent level. Any relaxation if necessary on any specific reasons, be permitted by Chairman Senate on case to case basis after reviewing the merit.
- 4. The synopsis is sent to the selected examiners by email and their willingness to examine the thesis is ascertained. If any examiner is unwilling to accept the examinership, or no response is received within a fortnight, another from the list is contacted.
- 5. The research guide(s) will serve as the third examiner.

If Dean (Academic Affairs) is the research supervisor, the Director or his nominee will act on behalf of Dean (Academic Affairs).

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THESIS SUBMISSION

Electronic copy of the thesis produced in the prescribed format are to be submitted to the Dean (Academics)'s office within two months of the submission of the synopsis. The thesis is to be forwarded to the Dean (Academics) by the thesis Guide(s) and the Chairperson of the School with due certifications. In case one or more of the reviewers ask for hard-copies the student will have to submit the required number of hardcopies within seven working days. Required number of hard copies must be submitted at the final stage after all corrections and changes, if any, as required by the reviewers and viva-voce examination committee have been applied.

Integrated PhD students who submit their Ph.D theses within three weeks of the date of registration of any given semester be allowed to register without fees for that semester provided they do not stay back in the institute after submission. Such students may be allowed 'Leave-Till-Defense (LTD)' along with registration without fees in subsequent semesters, if any, till their final PhD defense.

THESIS EXAMINERS' REPORT

The thesis is sent to all the examiners for evaluation and for their comments on the originality and scientific merit of the findings of the author and to judge whether the work deserves the award of the PhD Degree of IISER-TVM. Specifically they will be asked to give *one* of the following verdicts:

- The thesis is acceptable as such without any revision. I recommend the award of the Ph.D. degree of IISER-TVM to the candidate.
- The thesis is acceptable as such without any revision. I recommend the award of the Ph.D. degree to the candidate subject to his/her satisfying the Viva Voce board about the questions/clarifications I have raised in my report.
- The thesis needs revisions along the lines I have suggested in my report. The Ph.D. degree can be awarded to the candidate after the revisions are made to the satisfaction of the Doctoral Committee. The revised thesis need not be sent to me.
- The thesis needs revisions along the lines I have suggested in my report. I
 wish to see the revised thesis.

20 Thesis submission

The thesis is not acceptable for reasons I have given in detail in my report. I do not recommend the award of the Ph.D. degree of IISER-TVM to the candidate.

OBTAINING THESIS REPORTS

The following steps are taken by the Dean (Academics)'s office after sending the thesis to the examiners.

- The examiners are reminded of the report every fortnight, after an initial period of 3 weeks.
- Monthly status report of the progress of reviewing is sent to the Chairperson of the School/Department.
- If no report is received within 3 months of sending the thesis, a new examiner may be appointed by the Director.

FURTHER PROCESSING OF THESIS REPORTS

On receipt of both the reports, the Dean (Academics) convenes the DC to discuss the reports and to take further action. The following guide lines may be observed by the DC in arriving at their decision:

- If the verdicts from the two external examiners are either (1) or (2), the DC may recommend holding the open Viva Voce Examination.
- If the verdicts from the external examiners are both (5), the Dean (Academics) may constitute a committee of experts from the institute to recommend further action.
- If one of the verdicts alone is (5), a third examiner may be appointed. If the third report in this case is also (5), the Dean (Academics) may constitute a committee of experts from the institute to recommend further action with the approval of the competent authority.
- Viva Voce examination can be held only when two final reports are positive.

Viva Voce Examination

Once two external positive reports are received, the Dean (Academics) approves the holding of the Viva Voce Examination and appoints the Viva

Viva Voce Examination 21

Board. The composition of the Board is as follows: Chairperson of the Board is one of the external thesis examiners; other members are the Guide(s) and two members of the IISER faculty with similar research interest.

The examiners may seek answers to the questions raised in the thesis reports.

The Chairperson reports the result of the Viva Voce examination to the Dean (Academics). If the Board declares the candidate to have performed satisfactorily, and recommends that PhD Degree be awarded to the candidate, the Dean (Academics) forwards the recommendation to the Senate of the Institute. The Senate may then recommend the award of the Degree to the Board of Governors.

Bound copies of the thesis are to be deposited in the Central library and School or Departmental Libraries along with an abstract.

Course Code and Credit Requirements

The first three semesters will consist of core and elective courses specialized in one subject (Biology, Chemistry, Mathematics or Physics). The fourth semester will consist of advanced courses and project work.

The third year will be devoted to a project carrying 30 credits (15 credits per semester). The final (sixth semester) project evaluation also serves as the comprehensive examination for those students wishing to continue in the PhD program. After the successful completion of comprehensive and project work, the student will continue with research leading to the Ph.D. degree.

Course codes

The CORE and elective courses are numbered in the following format,

XYZ LCC (LTPC) XYZ LCCD (LTPC)

respectively. The numbering may be understood as

XYZ : Subject Code

L : Level of the course (3, 4 or 5)

CC (CCD) : Course number (in a particular sub-

ject)

L : Lecture hours
T : Tutorial hours

P : Practical hours

C : Credits

Subject Codes (XYZ)

MSB: Biological Sciences MSC: Chemical Sciences MSM: Mathematical Sciences MSP: Physical Sciences

Minimum Credit Requirement

The minimum number of credits required to successfully complete the Integrated PhD programme is 60. Over the first two years, students need to take 300 level or higher level courses. Research work in the fourth semester will constitute six credits and will be graded. CGPA must not be below 6.5. Individual Schools are free to place additional 6 credits requirements.

Schools will also specify how the credits are split between theory and laboratory courses. In the subsequent semesters students need to register for thesis research worth zero credit.

First four semesters

A table outlining the course requirements (sample structure only) for the first four semesters are given below. The total earned credits shown are minimum values. Individual schools may choose to offer extra courses.

First year

SEMESTER 1

SL. No.	Course	CREDITS	CORE COURSES	ELECTIVES	TOTAL
1	Core 1	3	This Semester	This Semester	This Semester
2	Core 2	3	15	0	15
3	Core 3	3			
4	Core 4	3	Cumulative	Cumulative	Cumulative
5	Core 5 (Lab/Theory)	3	15	0	15

First four semesters 25

SEMESTER 2

SL. No.	Course	CREDITS	CORE COURSES	ELECTIVES	TOTAL
1	Core 1	3	This Semester	This Semester	This Semester
2	Core 2	3	15	0	15
3	Core 3	3			
4	Core 4	3	Cumulative	Cumulative	Cumulative
5	Core 5 (Lab/Theory)	3	30	0	30

Second year

SEMESTER 3

SL. No.	Course	CREDITS	CORE COURSES	ELECTIVES	TOTAL
1	Core 1	3	This Semester	This Semester	This Semester
2	Core 2	3	12	3	15
3	Core 3	3			
4	Elective 1	3	Cumulative	Cumulative	Cumulative
5	Core 5 (Lab/Theory)	3	42	3	45

SEMESTER 4

SL. No.	Course	CREDITS	CORE COURSES	ELECTIVES	TOTAL
1	Elective 1	3	This Semester	This Semester	This Semester
2	Elective 2	3	0	15	15
3	Elective 3	3	Cumulative	Cumulative	Cumulative
4	Research work/				
	Advanced Electives	6	42	18	60

Conduct and Discipline

Code of Conduct

Every student is expected to evolve as a responsible citizen with a commitment to upholding the dignity and reputation of the Institute. Students are expected to be courteous and respectful in their interactions with all members of the IISER community and behave in a civilised and dignified manner.

Hostel Regulations: IISER-TVM being a residential Institute, all registered students are expected to reside in the Institute hostel throughout their course of study. There are separate hostels for boys and girls. Each room will usually be shared by two students and is furnished with basic furniture and electrical fittings. Residents of the hostels/hall of residences must abide by the hostel regulations detailed in Hostel Regulations booklet, a copy of which is available on the institute webpage.

• Disciplinary Regulations:

Any misconduct will invite a disciplinary action against the student. Misconduct refers to any unacceptable behaviour/act and failure to act on something that is unlawful and/or inappropriate. Misconduct has been categorised into following four types:

- 1. Academic misconduct
- 2. Non-academic misconduct
- 3. Media and Social Media-related misconduct
- 4. Criminal Offence

Based on the nature of an offence a disciplinary committee will be formed which will decide the further course of action. The detailed information on code of conduct and disciplinary procedure of the institute is available on the institute webpage in the booklet titled Code of Conduct; which is binding for all students of the institute.

• Internal Committee: Institute upholds the equal opportunity and gender equality as per the constitute. The objective of the Internal Committee is to investigate complaints and recommend action against any kind of sexual harassment. Further information regarding the same is available on the institute webpage.

Honour Pledge

1. The student must sign and submit to the Institute the following Honour Pledge at the time of registration in the Varsha semester. The pledge must be counter-signed by the parent/guardian.

IISER TVM STUDENT HONOUR PLEDGE

- a. I promise, on my honour, that I will conduct myself in the Institute and outside, with decorum and decency befitting the high moral and ethical standards expected of the members of the National Institute, IISER TVM and follow its rules and regulations
- b. I will not engage in ragging. I understand that ragging is unlawful and liable to prosecution by law enforcement authorities of the State besides any disciplinary action the Institute may take which may include dismissal from the Institute.
- c. I will not engage in overt/covert sexual harassment.
- d. I will not resort to any dishonest practice in examinations/assignments.
- e. I will not engage in plagiarism in my writings and will acknowledge the work of other authors according to international practices.
- $f. \ \ I \ will \ follow \ the \ Library \ and \ Hostel \ regulations \ of \ the \ Institute.$
- g. I understand that violation of this pledge makes me liable to disciplinary action by the Institute.

Sd/- Sd/-Student Parent/Guardian

2. The student and his/her parent/guardian should also sign, at the time of admission, the prescribed anti-ragging forms (visit http://iisertvm.ac.in/anti-ragging-initiatives) as per the stipulation of the MoE, Govt. of India.

Violation of any of the above rules shall make the student liable to disciplinary action by the Institute.

Library Regulations

1. Library Hours:

- a. Monday to Friday: 9:00 AM to 10.00 PM (Break 8:00 PM 8:30 PM)
 - Weekends and Holidays: 9:00 AM to 5.30 PM (Break 1:00 PM 1.30 PM)
- b. Library remains open on all holidays except on January 26, August 15 & October 2.
- 2. All registered Int Ph.D. students are eligible for membership in the institute library.
- 3. Int Ph.D. students can borrow a maximum of 4 books at a time for 15 days, provided they do not have any overdue book. After completion of 4th semester Int Ph.D. students can borrow 10 books for 60 days. (Some books may have a shorter loan period depending on its demand). Users can borrow/return the books using the self-service kiosk installed in the library.
- 4. Users must leave their bags and other belongings outside the Library. Only notebooks and papers are allowed inside the library. Borrowed books are allowed to be taken to the library for return/renewal only.
- 5. Students must carry their identity cards, and it must be produced whenever asked for. Institute identity card, which serves as the library card, is mandatory for borrowing books from the library either through the self-service-kiosk or otherwise.
- 6. Strict silence to be maintained in the library.
- 7. Mobile phone conversation, Consumption of food and drinks are strictly prohibited inside the library. Use of mobile phone is permitted for mobile based Library Services only.
- 8. Users are encouraged to use the computers kept inside the library for accessing the library catalogue, e-journals, e-books, and academic databases. Laptop can only be used in the designated place in the library.
- 9. Return of the borrowed book is mandatory on or before the due date. A fine of Rs.1.00 per day per book for the first week of delayed return and Rs.10/- per day per book thereafter will be levied. Books can be renewed once, on or before the due date, if there is no pending reservation against it. A book may be recalled any time before the due date

- if it is urgently required by another user. A late fee of Rs.10.00 per day per book will be imposed for the noncompliance with the requirement.
- 10. Reference textbook and borrowable books can be borrowed for overnight reference, half an hour before the closing time of the library and to be returned before 9.30 AM on the next working day. Only one book can be borrowed for overnight reference. A late fee of Rs. 50.00 per day per book for the delayed return of such item will be charged. All library payment will be accepted online only, at periodic intervals.
- 11. Mutilation of books in any form (e.g., underlining, writing on pages, tearing off pages, damaging the binding, etc.) will lead to a hefty fine or even replacement of the book. Before borrowing a book, users should ensure the condition of the book and bring to the notice of the library staff, if any mutilation is found.
- 12. Users who lose/mutilate library books are liable to replace it with its latest edition along with a penalty of 20% of the total cost of the book. If the book is part of a set or series, they may be called upon to replace the whole set or series. In case the lost book is untraceable in the market or out of print, Institute reserves the right to decide appropriate penalty.
- 13. Users must return all the books they borrowed before they go on vacation.
- 14. Users should create an user ID and password in the library portal (https://librarycatalog.iisertvm.ac.in/), to reserve, renew, and to check details of books borrowed by them. This password is required for borrowing books through the Self Service Kiosk. Up to three books can be reserved (hold) at a time. Once the reserved book is available in the library, users will be notified by an auto-generated email.
- 15. Users should obey copyright regulations while accessing online resources (e-books, e-journals, databases, etc.). Details of the e-resources subscribed by the institute are available at https://www.iisertvm.ac.in/pages/iiser_tvm_library, which can be accessed from any computer, laptop, smartphone, etc., connected to the IISER TVM network.
- 16. For accessing the online resources from off campus, during vacation, lockdown, or while undertaking the research project in other organisations etc. users may contact the library, for obtaining remote login facility. Remote login facility will be provided subject to availability of slots.

17. Users should obey the library rules and regulations. Violation of rules and any act of misbehaviour will be brought to the notice of the institute authority and will lead to intense disciplinary action.

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