# INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH THIRUVANANTHAPURAM

An autonomous institution under the

Ministry of Human Resource Development, Government of India



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

2018-19 www.iisertvm.ac.in

The Indian Institute of Science Education and Research (IISER) is an Institution conceived and established by the Ministry of Human Resources Development (MHRD) of the Government of India. The mission of the Institute is to offer postgraduate level teaching of the highest international standards to school leaving (+2) students and also to conduct frontline research leading to Ph.D. Degree, in basic sciences like Biology, Chemistry, Physics, Mathematics and other Interdisciplinary Science subjects.

The seven IISERs established by MHRD are at Berhampur, Bhopal, Kolkata, Mohali, Pune, Thiruvananthapuram and Tirupati.

#### **IISER THIRUVANANTHAPURAM CAMPUS**

IISER TVM started functioning in August 2008 at the transit campus in the Department of Computer Science of the College of Engineering, Thiruvananthapuram (CET).

The Institute is residential. The permanent campus of 200 acres at Vithura, at the foothills of the Ponmudi Hills, about 40 km from Thiruvananthapuram. The campus if fully functional since 2017. The site for the campus is blessed with rich greenery, three streams, a river running through it and a spectacular mountain backdrop.

# **Contents**

Regulations	1
About the programme	1
Eligibility	1
Selection procedure	1
Enrollment	2
Duration of the Programme	2
Registration	2
Fellowship	3
Leave	3
Coursework	5
Faculty Adviser	5
Assessment	5
Grading	6
Essentials for Completing Courses	7
Course Feedback	9
Re-evaluation of End Semester Examination Answer Sheets	9
Requirements for continuing in the Integrated Ph.D. Programme	9
Comprehensive examination	9
Removal from the rolls	10
Sample transcript	11
Research work	13
Starting of the research work and Supervisor	13
Doctoral Committee	13
Monitoring Research Progress	13
Research Seminars	14

Thesis submission	15
Thesis Synopsis	15
Thesis Examination	15
Selection of Examiners	15
Thesis Submission	16
Research proposal	16
Thesis Examiners' Report	16
Obtaining Thesis Reports	17
Further Processing of Thesis Reports	17
Viva Voce Examination	18
Course Code and Credit Requirements	19
Course codes	19
First four semesters	20
Conduct and Discipline	23
Code of Conduct	23
The Disciplinary Procedure	24
Disciplinary Actions	25
Disciplinary Action for Malpractices in Research:	25
Honour Pledge	26
Library Regulations	27
Deans, Heads and Coordinators	29
Faculty	31
Adjunct Faculty	36
Visiting Faculty	37
Guest Faculty	37
Emeritus Professor	37
Honorary Professor	37
Visiting Professors	38
AD-HOC Faculty-Humanities	38
•	30
Administration	39
Physical Instructor	41
Dean – Academic Office	41
Deputy Registrar – Academic Office	

# 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 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. After the successful completion of comprehensive and project work, the student will continue with research leading to the Ph.D. degree.

# **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 admitted to School of Physics must have a valid score in Joint Entrance Screening Test (JEST).
- 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 to 50% or 5.5 out of 10 CGPA for SC/ST and PD candidates.

# **Selection procedure**

Applications for the programme will be invited through press advertisement and announcement at the Institute's website: www.iisertvm.ac.in. Short-listed candidates who have applied for School of Biology, Chemistry and Mathematics will be called for a written test and those short-listed in the written test will appear for interview(s). In the School of

2 Regulations

Physics, candidates with a valid JEST scorecard will be called for the interview

#### 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 canceled and any re-registration must have the approval of the Academic council/Senate.
- MS Degree will not be awarded to the students of Integrated Ph.D. programme, who wish to exit during their programme.

# Registration

- Every student must register for the courses of a semester on the first day (registration day) of the semester.
- 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).

<sup>&</sup>lt;sup>1</sup> refer page 7, clause 2 of Essentials for Completing Courses

Leave 3

# **Fellowship**

The students will be awarded Institute scholarship of Rs. 10,000/- per month until the successful completion of the coursework and comprehensive examination, provided the student maintains a minimum CGPA (cumulative grade point average) of 6.5 out of 10 at the end of each academic year.

After clearing the comprehensive examination the studentship will be made equivalent to that of UGC-CSIR JRF/SRF excluding the contingency grant and HRA. The studentship will be paid for a maximum of 14 semesters (including 4 semesters of course work) for each student provided (s)he is in good academic standing.

Fellowship stands automatically terminated at the end of 14 semesters for which the student registered.

#### 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 completion of the Programme. Students will loose 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.

# 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.

#### **Theory Courses:**

Assignments : 10%
Mid-Semester Examination-II : 20 %
Mid-Semester Examination-II : 20 %
End Semester Examination : 50 %

#### **Practical Courses:**

80% weightage will be given through a continuous evaluation (based on experiments performed and viva) conducted during the practical hours. All experiments will be given equal weightage and marks will be given on completion of each experiment and be recorded in the students laboratory note books. 20% weightage will be given for written/viva examinations conducted at the end of the semester.

6 Coursework

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

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

$$\mathrm{AGPA} = \sum_j \mathbf{A}_j \mathbf{G}_j / \sum_i \mathbf{A}_j$$

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

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

Where,  $C_k$  = credit for  $k^{\rm th}$  course;  $G_k$  = Grade point secured by the student in the  $k^{\rm th}$  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 is to be calculated based on all course credits completed with a Pass Grade only.

# **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

8 Coursework

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 foundation and core courses), or
  - (ii) substituted with an alternative/same course and completed with a D grade or better (applicable *only* for minor/elective courses) or
  - (iii) The necessary credit requirements for continuing in the Integrated PhD programme are satisfied.
- 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.

#### Course Feedback

Online course feedback by students will be done for every course.

# **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.

# Requirements for continuing in the Integrated Ph.D. Programme

- 1. The minimum number of successfully completed credits is 60 in four semesters. Research work (if any) will constitute 6 credits.
- 2. CGPA must be 6.5 or above.
- 3. Pass the comprehensive examination (as specified by the individual Schools).

All the above requirements must be satisfied to continue in the doctoral programme. Individual Schools are free to place additional requirements; pertaining to minimum credit requirements, the nature of comprehensive examination and how the credits are split between theory and laboratory courses.

# Comprehensive examination

- 1. After completing 60 credits, students with a CGPA of 6.5 or above are required to pass a comprehensive examination, in order to continue in the doctoral programme.
- 2. The comprehensive examination must be passed in a maximum of two attempts.

10 Coursework

- 3. Pattern of the Comprehensive examination is the following:
  - 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.
  - c. Followed by questions by the Oral Exam Committee on the topics of the presentations and the basics of the subject matter of the course work done.
  - d. For School of Mathematics:
    - (a) & (b) refereed above to be replaced by a seminar.
    - (c) As mentioned above
  - e. Weightage:
    - (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 <u>each</u> academic year, will lead to removal of the student from the rolls.
- A second failure in the comprehensive examination will lead to removal of the student from the rolls.
- 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 and project work 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 Chairman, 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.

Sample transcript 11

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

# Sample transcript

#### OFFICIAL GRADE CARD

		XXX has attended 2 semesters o	f classes	at IISER Thiruvananthapuram	
/arsha	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	
/asanti	h 20XX				
		Organic Synthesis	3	B+	
		Organometallic Chemistry	3	A	
CHY		Advanced Molecular Spectroscopy	3	В	
			3	E+	
CHY	324	Spectroscopy and Structure			
		Determination	3	B+	
CHY	325	Advanced Chemistry laboratory-II	3	A	
			SGPA:	8.17	
	Tot	al credits completed: 33 CGPA: 8.1	3		

# Research work

# Starting of the research work and Supervisor

After the successful completion of the course work and comprehensive examination, depending on the mutual research interest of the faculty and student, the Institute will assign a research guide(s).

The guide is primarily responsible for the research work and well being of the student.

#### **Doctoral Committee**

Each student will have a Doctoral Committee (DC) appointed by the School/Institute. The DC will consist 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.

# **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.

14 Research work

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. PhD student receiving Institute fellowship, 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 and DC Members. 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 judged as *satisfactory* or *unsatisfactory*. In the latter case, a suitable course of action will be suggested by the DC.

# Thesis submission

# **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 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.

- A panel of two external examiners is confidentially selected by the Dean (Academics) from a list of a minimum of four possible examiners suggested by the DC, at the synopsis evaluation meeting. The list should contain their contact details.
- 2. 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.
- 3. The synopsis is sent to the selected examiners by email and their will-ingness 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.

16 Thesis submission

4. 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).

#### 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.

#### RESEARCH PROPOSAL

In addition to the thesis, the student is to prepare a detailed research proposal not directly connected with the thesis (not more than 4000 words) and submit it to the Doctoral committee within four weeks of the submission of the Ph.D. thesis. The research proposal must provide details of the idea and supporting documentation which justifies its feasibility. The idea of the research proposal is to provide a starting point of the students' independent research career.

#### 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:

- 1. 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

Thesis Examination 17

satisfying the Viva Voce board about the questions/clarifications I have raised in my report.

- 3. 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.
- 4. The thesis needs revisions along the lines I have suggested in my report. I wish to see the revised thesis.
- 5. 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 Dean (Academics).

#### 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.

Thesis submission

• 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.

• 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 an open Viva Voce Examination and appoints the Viva Board. The composition of the Board is as follows:
  - Chairperson of the Board is one of the thesis external examiners.
  - Members consist of: (a) Guide(s) and (b) two members of the IISER faculty with research interest in related areas.
- The examiners may seek answers to the questions raised in the thesis reports.
- At the discretion of the Director, in situations where the thesis examination is delayed and student has left the country for another assignment, thesis examination may be conducted via video conferencing.
- After the thesis presentation, the student will have to defend the *research proposal* submitted to the DC.
- 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.
- 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.

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,

$$XYZ LSC (LTPC)$$
  $XYZ LSCD (LTPC)$ 

respectively. The numbering may be understood as

XYZ : Subject Code

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

s : Semester (1 = Varsha, 2 = Vasant)

C (CD) : Course number (in a particular

subject)

L : Lecture hours

T : Tutorial hours

P : Practical hours

C : Credits

Subject Codes (XYZ)

BIO: Biological Sciences

MAT: Mathematical Sciences

CHY: Chemical Sciences

PHY: 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 21

# 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

Disciplinary policies of Indian Institute of Science Education and Research Thiruvananthapuram (IISER-TVM) are put in place to ensure a secure academically enriching environment for all members of the community and to promote civility on campus. Students of IISER-TVM are expected to show personal integrity, respect for Institute resources, and respect for others rights, for the values of scholarship and teaching. Students are expected to adhere to the institute rules and regulations. Any violation will be handled according to the rules set forth by the Senate and Board of Governors of IISER-TVM. The administrators of the institute may notify parents/guardians if a student behaves recklessly or his/her academic career is in serious jeopardy.

Any of the following shall constitute violation of the Code of Conduct for students and makes the student liable to disciplinary action by the Institute.

- Lack of courtesy and disorderly conduct or disruptive acts (within or outside Institute premises).
- Any act that compromises the safety/security of individuals or Institutional facilities.
- Wilful damage or unauthorized removal of Institute property.
- Unauthorized access to institutional facilities/records.
- Tampering of data/records (reading, copying or destroying).
- Any act of fraud/misrepresentation/dishonesty.
- Misappropriation of any belongings of fellow students/staff/faculty.
- Adoption of unfair means during examinations or misconduct in research.
- Infringement of personal privacy.
- Ragging in any form.
- Caste/religion/ethnicity/gender/physical disability based discriminatory behaviour/remarks.
- · Sexual harassment/assault.

- Possession of banned substances or dangerous items (illegal drugs, weapons, firearms etc.) that endangers safety of student himself/herself or others.
- Any act that affects the reputation/orderly conduct of the institute.

# The Disciplinary Procedure

- 1. The Student Disciplinary Committee (SDC) of the Institute is constituted under the chairmanship of a faculty member by the Director. Depending on the issues of allegations involved, the Chairman of the SDC may invite additional members, for example the Coordinator of BS-MS/PhD Programme, student's faculty advisor/research supervisor, Deputy Registrar (Academics & Administration), to facilitate with the investigation.
- 2. SDC will investigate the allegations of misdemeanours or violation of the Code of Conduct, without bias. The SDC will subsequently submit a fact-finding report and recommend disciplinary action(s), if any, to the Dean, Student Affairs.
  - Complaints related to caste/religion/ethnicity/gender-specific discrimination and sexual harassment will be investigated by an appropriate committee of the Institute and will report directly to the Director.
- 3. While hearing the disposition of the accused student(s) and witnesses, the Chairman, SDC may invite two senior student observers, from the BS-MS (5th Yr) and PhD/IPhD programmes respectively, to be present with the SDC.
- 4. The student observers are to be invited by the Chairman, SDC in consultation with the Dean, Student Affairs, from a list of nominees forwarded by the Schools. The list of nominees is valid for a year.
- 5. The student observers shall withdraw at the conclusion of the above and may submit their remarks (if any) in writing to the Chairman, SDC for consideration.
- 6. The Chairman, SDC, shall keep records of the entire proceedings of the meetings.
- 7. All disciplinary actions shall be notified in writing to the concerned students and their parents/guardians by the Office of the Registrar.
- 8. A student who feels aggrieved with the disciplinary action may appeal to the Director. The appeal has to be filed within a period of one month

from the date of intimation of disciplinary action stating clearly the case and explaining his/her position and reason(s) for reconsideration of the decision.

# **Disciplinary Actions**

Violation of the Code of Conduct shall invite disciplinary action, which may include penalties such as, reprimand, fine, suspension/expulsion from the hostel, debarring from examinations, withdrawing/withholding of scholarship/fellowship/benefits or access to institute facilities, withholding of grades and/or degrees and suspension for a certain period or even permanent expulsion from the Institute.

The Senate may withhold recommendation of a student, who is found guilty of a major offence, to the Board of Governors for the award of a degree, even if the student has satisfactorily completed all the academic requirements.

Lack of knowledge of the rules and regulations is not an admissible excuse or defence for misconduct/dishonesty, and shall not be a basis for leniency.

# **Disciplinary Action for Malpractices in Research:**

Students involved in conducting research at IISER-TVM are expected to maintain highest standards of integrity. Any form of unscrupulous conduct will be investigated by competent authorities and could warrant a variety of disciplinary actions, in severe cases cancellation of Ph.D. registration or even cancellation of an awarded Degree at any time.

Research misconduct can take place in many forms, including deliberate interference with the integrity of the work of others, plagiarism, falsification of data, and fabrication of data. In particular, students are expected to observe the practice of acknowledging source(s) of information reproduced in his/her thesis, reports, publications, or seminars.

*Plagiarism* includes, without citation, the appropriation of other's text, results, or ideas.

Falsification includes actions such as not accurately representing research records or results, manipulating reagents or equipment settings, to produce a preconceived outcome.

Fabrication includes making up data and recording them.

# **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 MHRD, Govt. of India.

# **Library Regulations**

- 1. Library Hours:
  - a. Monday to Friday: 9 AM to 10.00 PM
     Weekends and Holidays: 9 AM to 5.30 PM
  - b. Library remains open on all holidays except during January 26, August 15 & October 2.
- 2. All registered IntPhD students are eligible for membership in the institute library.
- 3. IntPhD students can borrow maximum 4 books at a time for 2 weeks, provided they do not have any overdue book. IntPhD students, who have successfully completed their MS course work can borrow 10 books for 60 days. (Note: Some books may have a shorter loan period depending on the demand).
- 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. All items taken out of the library (including personal items, if any) are to be produced for verification by the check point staff engaged in front of the library.
- 5. Always carry the identity card and must be produced whenever asked for. Identity card is mandatory for borrowing books from the Library.
- 6. Strict silence has to be maintained by all users inside the Library.
- 7. Use of Mobile Phones, Laptops, consumption of food and drinks are strictly prohibited inside the Library.
- 8. Use of the user PC kept inside the library is allowed for accessing, library catalogue, e-journals, e-books and academic databases only.
- 9. Return of book is mandatory before the due date. A fine of Rs 1/- per day per book for the first week of delayed return and Rs 10/- per day per book thereafter will be levied. Renewal of a book is possible only 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 member. A late fee of Rs 10/- per day per book will be imposed for the noncompliance with the requirement.
- 10. Any book, including reference books can be borrowed for overnight reference, at the closing time of the library and to be returned at 9 AM on the next working day. Only one book can be borrowed for overnight

- reference. A late fee of Rs 50/- per day per book for the delayed return of such book will be charged.
- 11. Mutilation of books in any form (e.g. underlining, writing on pages, tearing off pages, damaging the binding etc.) will lead to a heavy 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. Members 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. All such replaced books must be of the latest edition. If the book is part of a set or series they may be called upon to replace the whole set or series. In case of the lost books is untraceable in market or out of print Library committee reserves the right to decide appropriate penalty.
- 13. IntPhD students should return all the books they borrowed before they go for vacation.
- 14. Users should obey the library rules and regulations. Violation of rules and any act of misbehaviour will be brought to the notice of the Library Committee Chair, and will lead to strong disciplinary action.

# **Deans, Heads and Coordinators**

1. Prof. M. P. Rajan

Dean (Academics)

e-mail: rajanmp@iisertvm.ac.in Tel: 0471-2778016, 8017

2. Dr. Anil Shaji

Associate Dean (Planning & Development) e-mail: shaji@iisertvm.ac.in Tel: 0471-2778080

3. Dr. Ramesh Chandra Nath

Associate Dean (Students Affairs) Head, School of Physics

e-mail: rnath@iisertvm.ac.in Tel: 0471-2778137

4. Dr. Hema Somanathan

Associate Dean (R&D Consultancy) e-mail: hsomanathan@iisertvm.ac.in Tel: 0471-2778063

5. Dr. Nishant K. T

Head, School of Biology

e-mail: nishantkt@iisertvm.ac.in Tel: 0471-2778173

6. Dr. Mahesh Hariharan

Head, School of Chemistry

e-mail: mahesh@iisertvm.ac.in Tel: 0471-2778101

7. Dr. Devaraj P.

Head, School of Mathematics

e-mail: devarajp@iisertvm.ac.in Tel: 0471-2778145

8. Dr. Sukhendu Mandal

Coordinator, BS-MS Programme

e-mail: sukhendu@iisertvm.ac.in Tel: 0471-2778107

9. Dr. Reji Varghese

Coordinator, PhD and IPhD Programmes e-mail: reji@iisertvm.ac.in Tel: 0471-2778074

## 10. Dr. Ramanathan Natesh

#### SCHOOL OF BIOLOGY

1. Prof. Srinivasula Srinivasa Murty e-mail: sms@iisertvm.ac.in Tel: 0471-2778171

2. Dr. Hema Somanathan e-mail: hsomanathan@iisertym.ac.in Tel: 0471-2778063

3. Dr. Kalika Prasad e-mail: kalika@iisertvm.ac.in Tel: 0471-2778170

4. Dr. Nishant K.T. e-mail: nishantkt@iisertvm.ac.in Tel: 0471-2778173

5. Dr. Ramanathan Natesh e-mail: natesh@iisertvm.ac.in Tel: 0471-2778087

6. Dr. Stalin Raj V e-mail: stalin@iisertvm.ac.in Tel: 0471-2778160

7. Dr. Sunish Kumar Radhakrishnan e-mail: sunish@iisertvm.ac.in Tel: 0471-2778174

8. Dr. Tapas Kumar Manna e-mail: tmanna@iisertvm.ac.in Tel: 0471-2778172

9. Dr. Jishy Varghese e-mail: jishy@iisertvm.ac.in Tel: 0471-2778169

10. Dr. Nisha N. Kannan e-mail: nishankannan@iisertvm.ac.in Tel: 0471-2778045

11. Dr. Ravi Maruthachalam e-mail: ravi@iisertvm.ac.in Tel: 0471-2778175

12. Dr. Sabari Sankar Thirupathy

e-mail: sabari@iisertvm.ac.in Tel: 0471-2778161

13. Dr. N. Sadananda Singh

e-mail: nssingh@iisertvm.ac.in Tel: 0471-2778047

14. Dr. Satish Khurana

e-mail: satishkhurana@iisertvm.ac.in Tel: 0471-2778046

15. Dr. Ullasa Kodandaramaiah

e-mail: ullasa@iisertvm.ac.in Tel: 0471-2778068

#### SCHOOL OF CHEMISTRY

1. Prof. K. George Thomas, FASC, FNA e-mail: kgt@iisertvm.ac.in Tel: 0471-2778040

2. Dr. Kana M. Sureshan

e-mail: kms@iisertvm.ac.in Tel: 0471-2778064

3. Dr. Mahesh Hariharan

e-mail: mahesh@ijsertym.ac.in Tel: 0471-2778101

4. Dr. Sukhendu Mandal

e-mail: sukhendu@iisertvm.ac.in Tel: 0471-2778107

5. Dr. Ajay Venugopal

e-mail: venugopal@iisertvm.ac.in Tel: 0471-2778076

6. Dr. Alagiri Kaliyamoorthy

email: alagiri@iisertvm.ac.in Tel: 0471-2778050

7. Dr. Gokulnath Sabapathi

e-mail: gokul@iisertvm.ac.in Tel: 0471-2778052

8. Dr. A Muthukrishnan

e-mail: muthukrishnan@iisertvm.ac.in Tel: 0471-2778104

9. Dr. Rajendar Goreti

e-mail: rajendar@iisertvm.ac.in Tel: 0471-2778049

10. Dr. Ramesh Rasappan

e-mail: rr@iisertvm.ac.in Tel: 0471-2778051

11. Dr. Reji Varghese

e-mail: reji@iisertvm.ac.in Tel: 0471-2778074

12. Dr. R. S. Swathi

e-mail: swathi@iisertvm.ac.in Tel: 0471-2778079

13. Dr. A. Thirumurugan

e-mail: thiru@iisertvm.ac.in Tel: 0471-2778092

14. Dr. Vennapusa Sivaranjana Reddy

e-mail: siva@iisertvm.ac.in Tel: 0471-2778057

15. Dr. Vinesh Vijayan

e-mail: vinesh@ijsertym.ac.in Tel: 0471-2778083

16. Dr. Subrata Kundu

e-mail: skundu@iisertvm.ac.in Tel: 0471-2778048

#### SCHOOL OF MATHEMATICS

1. Prof. M. P. Rajan

e-mail: rajanmp@iisertvm.ac.in Tel: 0471-2778116

2. Dr. P. Devaraj

e-mail: devarajp@iisertvm.ac.in Tel: 0471-2778145

3. Dr. Shrihari Sridharan

e-mail: shrihari@iisertym.ac.in Tel: 0471-2778126

4. Dr. Utpal Manna

e-mail: manna.utpal@iisertvm.ac.in Tel: 0471-2778136

5. Dr. Arun K. R.

e-mail: arun@iisertvm.ac.in Tel: 0471-2778120

6. Dr. Geetha Thangavelu

e-mail: tgeetha@iisertvm.ac.in Tel: 0471-2778134

7. Dr. Mithun Mukherjee

email: mithunmukh@iisertvm.ac.in Tel: 0471-2778054

8. Dr. Sachindranath Jayaraman

e-mail: sachindranathj@iisertvm.ac.in Tel: 0471-2778118

9. Dr. Saikat Chatterjee

e-mail: saikat@iisertvm.ac.in Tel: 0471-2778113

10. Dr. Sarbeswar Pal

e-mail: spal@iisertvm.ac.in Tel: 0471-2778125

11. Dr. Sheetal Dharmatti

e-mail: sheetal@iisertvm.ac.in Tel: 0471-2778128

12. Dr. Srilakshmi

e-mail: srilakshmi@iisertvm.ac.in Tel: 0471-2778149

13. Dr. Sumit Mohanty

e-mail: sumit@iisertvm.ac.in Tel: 0471-2778112

14. Dr. Viji Z. Thomas

e-mail: vthomas@iisertvm.ac.in Tel: 0471-2778055

#### SCHOOL OF PHYSICS

1. Prof. V. Ramakrishnan, FASc (CHENNAI), F INST. P (LONDON) e-mail: ramakrishnanlaser@iisertvm.ac.in Tel: 0471-2778009

2. Dr. Anil Shaji

e-mail: shaji@iisertvm.ac.in Tel: 0471-2778080

3. Dr. Joy Mitra

e-mail: j.mitra@iisertvm.ac.in Tel: 0471-2778140

4. Dr. Kumaragurubaran Somu

e-mail: guru@iisertvm.ac.in Tel: 0471-2778103

5. Dr. Manoj Namboothiry e-mail: manoj@iisertvm.ac.in Tel: 0471-2778081

6. Dr. Ramesh Chandra Nath e-mail: rnath@ijsertym.ac.in

e-mail: rnath@iisertvm.ac.in Tel: 0471-2778137

7. Dr. Shaijumon M. M.

e-mail: shaiju@iisertvm.ac.in Tel: 0471-2778122

8. Dr. Soumen Basak

e-mail: sbasak@iisertvm.ac.in Tel: 0471-2778129

9. Dr. Amal Medhi

e-mail: amedhi@iisertvm.ac.in Tel: 0471-2778152

10. Dr. Bikas C. Das

e-mail: bikas@iisertvm.ac.in Tel: 0471-2778071

Dr. Bindusar Sahoo

e-mail: bsahoo@iisertvm.ac.in Tel: 0471-2778058

12. Dr. Deepshikha Jaiswal Nagar

e-mail: deepshikha@iisertvm.ac.in Tel: 0471-2778141

13. Dr. Madhu Thalakulam

madhu@iisertvm.ac.in Tel: 0471-2778084

14. Dr. Mayanglambam Suheshkumar Singh

email: suhesh.kumar@iisertvm.ac.in Tel: 0471-2778139

15. Dr. Rajeev Naveenchandra Kini

e-mail: rajeevkini@iisertvm.ac.in Tel: 0471-2778138

16. Dr. Ravi Pant

e-mail: rpant@iisertvm.ac.in Tel: 0471-2778127

17. Dr. Shadak Alee K.

e-mail: ksalee@iisertvm.ac.in Tel: 0471-2778059

18. Dr. Senthil Kumar D. V.

e-mail: skumar@iisertvm.ac.in Tel: 0471-2778132

19. Dr. Sreedhar B. Dutta

e-mail: sbdutta@iisertvm.ac.in Tel: 0471-2778131

20. Dr. Vinayak B. Kamble

e-mail: kbvinayak@iisertvm.ac.in Tel: 0471-2778056

#### ADJUNCT FACULTY

- Prof. S. Natarajan, FASC, FNASC, FNA Solid State and Structural Chemistry Unit, IISc, Bangalore e-mail: snatarajan@sscu.iisc.ernet.in
- Prof. S. Mahalingam
   Department of Biotechnology, IIT Madras e-mail: mahalingam@iitm.ac.in
- 3. Prof. Thanu Padmanabhan, FASC, FNASC, FNA
  Distinguished Professor, Inter-University Centre for Astronomy and
  Astrophysics, (IUCAA), Pune
  e-mail: paddy@iucaa.in, nabhan@iucaa.in

#### VISITING FACULTY

Dr. Guram Donadze
 School of Mathematics
 e-mail: donadzeg@iisertvm.ac.in

#### **GUEST FACULTY**

Dr. G Jayakumar
 School of Chemistry
 e-mail: gjayakumarmgcollege@yahoo.com

 Dr. Ganga Devi School of Biology e-mail: gangadevi@iisertvm.ac.in

 Dr. Gopakumar School of Physics e-mail: kggopchandran@gmail.com

#### **EMERITUS PROFESSOR**

1. Prof. M. S. Gopinathan, FASC, FNA e-mail: gopi@iisertvm.ac.in

#### HONORARY PROFESSOR

1. Prof. N. Mukunda, FASC, FNA, FNASC, FTWAS e-mail: nmukunda@gmail.com

2. Prof. K. Dharmalingam e-mail: kdharmalingam@aravind.org

#### VISITING PROFESSORS

Prof. S. Sampath, FNA, FASC
 Department of Inorganic and Physical Chemistry Indian Institute of Science, Bangalore e-mail: sampath@ipc.iisc.ernet.in

2. Prof. M. S. Ramachandra Rao Department of Physics, IIT Madras e-mail: msrrao@iitm.ac.in

#### **AD-HOC FACULTY-HUMANITIES**

- 1. Dr. Jobin M. Kanjirakkat e-mail:jobin.kanjirakkat@iisertvm.ac.in
- 2. Dr. Harilal Madhavan e-mail: harilal@iisertym.ac.in

# Administration

1. Prof. V. Ramakrishnan, FASC (CHENNAI), F INST. P (LONDON)

Director

e-mail: director@iisertvm.ac.in Tel: 0471-2778009

2. Mr. M. Radhakrishnan

Registrar

e-mail: registrar@iisertvm.ac.in Tel: 0471-2778044

3. Mr. B. V. Ramesh

Deputy Registrar (F&A)

e-mail: ramesh@iisertvm.ac.in Tel: 0471-2778011

4. Mr. S. Hariharakrishnan

Deputy Registrar (Academics)

e-mail: hariharan@iisertym.ac.in Tel: 0471-2778007

5. Mr. Sudin B Babu

Deputy Registrar (P& S)

e-mail: sudin@iisertym.ac.in Tel: 0471-2778018

6. Mr. Manoj Kumar S.

Assistant Registrar (Establishments & Human Resources)

e-mail: mano459@iisertym.ac.in Tel: 0471-2778061

7. Mr. Satya Srinivas Naraharisetti

Assistant Registrar (Administration & Facilities)

e-mail: satya@iisertvm.ac.in Tel: 0471-2778031

8. Smt. Nimi Joseph Chaly

Assistant Registrar (Accounts)

e-mail: nimi@iisertvm.ac.in Tel: 0471-2778012

9. Dr. Sainul Abideen P.

Assistant Librarian

e-mail: sainul@iisertvm.ac.in Tel: 0471-2778022

40 Administration

#### 10. Dr. Thiraviam P.

Medical Officer

e-mail: mo.thiraviam@iisertvm.ac.in Mob: 9443693225

#### 11. Dr. Hemalatha Francis

Medical Officer

e-mail: mo.hemalatha@iisertvm.ac.in Mob: 09447733335

#### 12. Dr. Arun Muraleendran

Medical Officer

e-mail: arunmuraleendran@iisertvm.ac.in Mob: 07907787602

#### 13. Dr. Krishnapriya G. R.

Medical Officer

e-mail: kripri1989.kp@iisertvm.ac.in Mob: 094004582945

#### 14. Mr. Sreekumar P. Y.

Scientific Officer (IT)

e-mail: sreekumarpy@iisertvm.ac.in Tel: 0471-2778032

#### 15. Shri. Gopakumaran Nair

Assistant Security Officer

e-mail: aso@iisertvm.ac.in Tel: 0471-2778026 Mob: 9497211046

#### 16. Mr. Jayan V.

Assistant Security Officer, Vithura Campus

email: asovithura@iisertvm.ac.in Tel: 0472-2815014, 0471-2778026

#### 17. Mr. Arun Raghunath

Superintendent (GA)

email: arunraghunath@iisertvm.ac.in Tel: 0471-2778010

#### 18. Mr. Ajith Prabha

Superintendent (Dir. Office)

email: ajithsavera@iisertvm.ac.in Tel: 0471-2778009

#### 19. Ms. Veena P. P.

PA to Registrar

email: veena@iisertvm.ac.in Tel: 0471-2778044

# **Physical Instructor**

1. Mr. Arun Raj J.R

e-mail: arunrajjr@iisertvm.ac.in

#### **Dean - Academic Office**

1. Ms. Divya V. J.

Technical Officer

e-mail: acad@iisertvm.ac.in Tel: 0471-2778015, 8017

2. Ms. Suja V. R.

Multi Skill Assistant

e-mail: acad@iisertvm.ac.in Tel: 0471-2778017

3. Ms. Darli K. G.

P S

e-mail: darliantony@iisertvm.ac.in Tel: 0471-277 8017

# **Deputy Registrar - Academic Office**

1. Ms. Beena N. K.

Multi Skill Assistant

e-mail: beenaraj@iisertvm.ac.in Tel: 0471-2778070