GUIDELINES AND RULES

GOVERNING

Ph.D. Programmes

July 2013



Visvesvaraya National Institute of Technology, Nagpur

1. INTRODUCTION

1.1 PREAMBLE

These rules and regulations shall govern all Ph.D. programs in VNIT, Nagpur. These rules and regulations supersede all previous relevant rules and regulations.

As a result of the sound research base and extensive infrastructural facilities available, the Institute offers Ph.D. programme in a wide range of areas in Engineering, Science, Humanities and Social Sciences. The broad objective of the Ph.D. programme is not only to keep pace with the expanding frontiers of knowledge but also to provide research training relevant to the present social and economic objectives of the country.

The Institute also encourages research in interdisciplinary areas through a system of joint supervision and interdepartmental group activities. The presence of a strong research oriented faculty provides excellent opportunities for such program.

1.2 PROGRAMMES OFFERED BY THE INSTITUTE

Sr.	Programme	Minimum	Departments
No.		Duration of	
110.		Completion	
		of Program	
1.	Ph.D. (Full Time) with	3 yrs	Engineering: Civil, Mechanical,
	Teaching Assistantship *		Electrical, Electronics, Computer Science,
2.	Ph.D. (Full Time) Sponsored	3 yrs	Chemical, Metallurgical & Materials,
3.	Ph.D. (Part Time)	4 yrs	Mining, Applied Mechanics, Architecture
			Applied Sciences: Physics, Chemistry,
			Mathematics and Humanities.

Maximum Duration for completing programs

- The registration will be valid for a period of six years from the date of registration and **no** further extension will be granted under normal circumstances.
- After six years, if a candidate wishes to continue research, he / she will be required to apply for retention. A candidate should apply for retention before completion of six years of registration period. If the retention application is received after 1st January / 1st July, a candidate will be required to register again following the procedure for fresh candidates. The retention will be valid for a period of two years only.

*Candidates desirous of seeking admission to Ph. D. (Full Time) programme with teaching assistantship should note that

- 1. Number of seats per department may change depending on the availability & suitability of the candidates. (**Preference will be given to Full Time Ph.D. Scholars**)
- 2. Candidates having M. Tech. / M.E. qualification shall receive teaching assistantship @ Rs. 18,000/- per month for 1st / 2nd year and Rs. 20,000/- for 3rd year / 4th year subject to satisfactory progress.
- 3. Candidates having M Sc / M.A with valid GATE / NET qualification shall receive teaching assistantship @ *Rs. 16,000/-* per month for 1st / 2nd year and Rs. *18,000/-* for 3rd year / 4th year subject to satisfactory progress.
- 4. Candidates having M Sc / M.A but no GATE / NET qualification shall receive teaching assistantship @ Rs. 10,000/- per month.
- 5. Teaching assistantship shall be offered for a maximum period of four years only.

Note: For submission of thesis there should be minimum two research papers publications in Science Citation Index (SCI) journals OR Institution of Scientific Information (ISI) recognized journal for the batch admitting from July 2012 onwards and for others it is desirable. The research papers published in Social Sciences Citation Index (SSCI) and Arts & Humanities Citation Index (AHCI) can also be considered for Architecture and Humanities departments.

1.3 Notification for Admission

A notification for admission to Ph.D. shall be published in prominent newspapers & Institute Website. The details of the admission procedure will be available in the Institute brochure on Institute Website.

2. ADMISSION PROCEDURE

- 2.1. The application form is available on Institute website www.vnit.ac.in. The form, duly filled in by the candidate, along with xerox copies of the certificates and photograph duly attested and crossed DD/ Bankers Check of amount Rs. 500/(non-refundable) towards processing fee drawn in favour of The Director, VNIT, Nagpur, payable at Nagpur, should be send it to Dy. Registrar (Academic), VNIT, South Ambazari Road, Nagpur-440 010 and must reach on or before the last date of submission of application form (clearly mention admission category and department on the envelop in bold letters). Incomplete applications and applications received after the last date are liable to be rejected.
- 2.2. All Candidates will be required to appear for written test to be conducted in the respective departments on the date specified in the information brochure. Further, the candidates shortlisted on the basis of performance in the written test shall be interviewed. The written test will be of qualifying nature and the marks

- cutoff will be 50% to get qualified for appearing in interview. Candidates will be required to appear for written test / interview at their own cost.
- 2.3. The interviews for the short listed candidates will be conducted in the concerned departments as per the schedule given in the information brochure. The constitution of the interview committee will be as follows:
 - 1. HoD of the concerned department Chairman
 - 2. Dean(R&C) / Dean (Acd)/ Professor from other department Director's Nominee
 - 3. All faculty members from the concerned department/ discipline who are recognized Ph.D. supervisors— Members
- 2.4. The written test score will be appropriately factored in for deciding the relative merit. The weightages will be as follows:

1.Written Test 50%
2.Interview 40%
3.GATE Score (Above qualifying marks in the respective categories) 10%

- 2.5. The provisional list of selected candidates will be displayed on Institute's website and no separate intimation will be sent to the candidates. Candidates shall report to Dy. Registrar (Academic) for admission alongwith DD of prescribed fees.
- 2.6. Candidate shall report to the concerned department for allotted Supervisors. Candidate in consultation with the supervisor shall identify the area of research and prepare a synopsis. The supervisor will propose a Research Progress Committee, (RPC) for Ph.D. programme. The RPC shall monitor the progress of Ph.D. work of the candidate.

Following shall be the composition of RPC.

Head of the Concerned Department – (Chairman)

Supervisor(s)

Expert from Department (nominated by supervisor & approved by HoD) Expert from allied Department/ Discipline (nominated by supervisor & approved by HoD)

2.7. RPC shall recommend the courses to be undertaken by a candidate as per norms.

3. PAYMENT OF FEES AND DEPOSITS

- a) Application fee for Ph.D. registration: Rs. 500/- Nonrefundable (Through DD drawn in favour of *Director*, *VNIT Nagpur*)
- b) Other fees:

	Head	Ph.D.	Ph.D. Full	Ph.D. Part Time	Ph.D. Part Time /
		Full Time	Time	(I Year)	(Annual)
		(I year)	(Annual)		
1.	Registration fees	4000		10500	
2.	Library Deposit	2400		1500	
	(refundable)				
3.	Library Fees	1600		2000	
4.	Development	4800	4800	6000	6000
	Fees				
5.	Retention Fees		1600		4000
	Grant Total (Rs)	12800	6400	20000	10000

[#] Annual fee is to be paid every year in the month of July."

* Institute has student's Medical Fund and premium (one time) towards same will be required to be paid in addition to above fees. Premium amount will be informed later. This is applicable to full time/ sponsored (full time) scholars.

Examination Fee: The examination fee of **Rs. 25000/- for** *Ph.D. Part Time* and **Rs. 8000/- for Ph.D. full time** shall be paid by the candidate prior to the submission of the thesis.

Note:

- 1. The delay in payment of annual fees may invite cancellation of registration. Payment of fees is annual. Six-monthly seminar will not be conducted without payment of fees.
- 2. Students who will be staying in quarters will be required to pay license fees, water & electricity charges, etc. as applicable for occupation of these quarters as per the Estate Office Rule.

If the thesis submission is done after 30th June, candidate will be required to pay the fees for next academic session.

4. REQUIREMENT OF COURSE WORK

4.1. Requirement of course work for Ph.D.

Program	Qualification	Courses to be completed
Ph.D.	M. Sc. / M.A.	24 credits
Ph.D.	M. Sc. / M.A. with M. Phil.	12 credits
Ph.D.	M.E. / M. Tech. / M. Arch.	12 credits

RPC may recommend more course work if feel necessary. In addition to above, candidate will be required to undergo course in **Research Methodology** (Audit Course). Candidate will be required to complete the course work within **one / two years** of joining the program by **full time / sponsored (full time) / part time scholars respectively**. Ph.D. scholars can register / enroll for only 400 or 500 or higher level courses. Ph.D. scholars are exempted from pre-requisite requirements for all courses.

4.2. Coursework requirement conditions

- 1. Every Ph.D. scholar with M.Phil. / M.Tech. / M.E. degree shall be required to complete minimum 12 credits through courses recommended by his/her RPC. In addition to this every registered scholar shall be required to register for a course in **Research Methodology** as audit course.
- 2. Every Ph.D. scholar with M.Sc. / M.A. degree shall be required to complete minimum 24 credits through courses recommended by his/her RPC. In addition to this every registered scholar shall be required to register for a course in **Research Methodology** as audit course.
- 3. Research Progress Committee may recommend for undergoing instruction in communication skills course if needed. In that case a research scholar shall be required to register for communication skills course as an audit course.
- 4. Minimum CGPA requirement for the course work is 6.0.
- 5. In case of Ph.D. full time / sponsored (full time) scholar with teaching assistantship, the amount paid towards teaching assistantship shall be reduced if CGPA at the end of any semester fall below 6.0, to be restored after makeup.
- 6. **Residential Requirement**: For Ph.D. (Part Time) scholar there is residential requirement for the duration of 2 semesters.
- 7. The course work must be completed within the first year of joining the program by Full Time / sponsored (full time) scholars and within first two years of joining the program by Part Time Scholars.
- 8. Full time / sponsored (full time) Ph.D. scholar is not allowed to work (part time / full time) outside the Institute.

5. MINIMUM DURATION OF PROGRAM

- 1. Ph.D. (Full time) / sponsored (full time) Three years
- 2. Ph.D. (Part time) Four Years

6. VALIDITY OF REGISTRATION

- 6.1. The registration will be valid for a period of 6 years from the date of registration and no further extension will be granted under normal circumstances.
- 6.2. After 6 years, if a candidate wishes to continue research, he / she will be required to register again. A candidate should apply for retention before completion of 6 years of registration period. Failure to do so a candidate will be required to register again following the procedure for fresh candidates.

7. CANCELLATION OF ADMISSION / REGISTRATION

- 7.1.If a full time / sponsored (full time) Ph.D. scholar is absent from the Institute for more than four weeks without notifying the Supervisor or Head of Department or Dean (Acd), his/her registration will be terminated and name will be removed from the Institute roll.
- 7.2. The delay in payment of annual fees may invite cancellation of registration/termination of admission.

- 7.3. Failure of admission before the last date of registration.
- 7.4. Non completion of course work: before completion of 1 year for full time/ sponsored (full time) scholar and 2 years for part time scholar.
- 7.5.If reports of two consecutive seminars are unsatisfactory, RPC may recommend discontinuation of registration.
- 7.6.If three consecutive seminar reports are unsatisfactory OR if total four seminar reports are un-satisfactory, the registration shall be automatically cancelled. If seminar is not given, it shall be considered as not satisfactory.

8. ATTENDANCE RULES

- 8.1. All scholars must attend every lecture, tutorial and practical class. However, to account for late registration, sickness or other such contingencies, attendance requirement will be a minimum of 75 % of the classes actually held.
- 8.2. A scholar with less than 75% attendance in lectures, tutorials and practicals taken together (as applicable), in a course during the semester, will be awarded 'W' attendance in that course irrespective of his/her performance in the tests. The course coordinator will award 'W' grade to a scholar who is deficient in attendance, taking into account the consolidated attendance record for the whole semester for the course concerned. For the purpose of attendance calculation, every scheduled practical class will count as one unit irrespective of the number of contact hours.
- 8.3. Attendance record will be maintained based upon roll calls (or any equivalent operation) in every scheduled lecture, tutorial and practical class. The Course Coordinator will maintain and consolidate attendance record for the course (lectures, tutorials and practicals together, as applicable).

9. LEAVE REGULATIONS FOR FULL TIME / SPONSORED (FULL TIME) PH.D. SCHOLARS

i. A full-time/ sponsored (full time) Ph.D. scholar, during his/her stay at the Institute will be entitled 30 days leave during each academic year, including leave on medical ground. These scholars are not entitled to have vacation. Even during midsemester breaks and summer and winter vacations, he/she will have to explicitly apply for leave.

Leave beyond 30 days in an academic year may be granted to a research scholar in exceptional cases subject to the following conditions

- i. that the leave beyond 30 days will be without Assistantship/Scholarship, and
- ii. such an extension of up to additional 30 days will be granted only once during the entire programme of the scholar including self sponsored scholar.
- ii. Female research scholars will be eligible for Maternity Leave with assistantship for a period not exceeding 135 days once during the tenure of their entire programme.

The leave may be subject to the duly certification from authorized medical authority approval of the Head of Department concerned on the recommendation of the Supervisor; Proper leave account of each scholar shall be maintained by the Department.

10. ABSENCE DURING THE SEMESTER FOR COURSES REGISTERED

- 10.1. A scholar must inform the Supervisor or HoD or Dean (R&C) immediately of an instance of continuous absence from classes.
- 10.2. A scholar who is absent due to illness or any other unavoidable circumstances, up to a maximum of two weeks, should approach the course coordinator for make-up quizzes, assignments and laboratory work. Supporting document should be attached to the application.
- 10.3. A scholar absent from a sessional examination due to illness should approach the course coordinator for a make-up test immediately on return to class. The request should be supported with a medical certificate from Institute's Medical Officer. A certificate from registered medical practitioner will also be acceptable for a scholar normally residing off-campus, provided details of registration of the concerned Medical Practitioner appears explicitly on the certificate.
- 10.4. In case the period of absence on medical grounds is more than 20 working days during the semester, a scholar may apply for withdrawal from the semester, i.e. withdrawal from all courses registered that semester. Such application must be submitted as early as possible and latest one week before the start of the End Term Examination. No applications for semester withdrawal will be considered thereafter. Depending on merit of the case Dean (R&C), will consider such applications. Partial withdrawal from courses registered in a semester is not allowed.
- 10.5. If a scholar is continuously absent from the institute for more than four weeks without notifying the Supervisor / HoD / Dean (R&C), his/her name will be removed from institute rolls.

11. SEMINARS DURING PH.D WORK

- 11.1. A scholar is required to give a progress seminar on his / her project work every six months in concerned department during the Ph.D. seminar weeks indicated in academic calendar.
- 11.2. The time-table for six monthly seminars shall be displayed by the HoD at least 15 days prior to the seminar. A brief write-up outlining the work previously done, the current status and the future plans also should be submitted to the RPC members at least 3 days prior to date of seminar.
- 11.3. Report of the RPC after each six monthly progress seminar shall be duly forwarded to the office of the Dean (R&C) by the concerned department, in a format available on website.
- 11.4. Six monthly seminars shall be conducted only if annual fees are paid. No further seminar shall be conducted without payment of fees.

11.5. Report of six monthly seminars is required to be submitted to Dean(R&C) office within 15 days period after the last date of delivering the seminar mentioned in the academic calendar. The consolidated summary sheet along with copies of seminar reports and other documents of all candidates should be sent in a single lot. Individual seminar report of candidate will not be accepted.

12. COMPOSITION OF RPC

The Research Progress Committee (RPC) required to be set up for monitoring the progress of research for each registered scholar shall have following composition.

- 12.1. Chairman Head of the concerned Department/ One of the senior qualified supervisors nominated by Chairman Senate, when HoD is not a qualified supervisor.
- 12.2. Supervisor/Supervisors.
- 12.3. One RPC member (Expert) from the Department/Discipline to be nominated by the supervisor.
- 12.4. One RPC member (Expert) from the Allied Department/Allied Discipline to be nominated by the supervisor.

13. REQUIREMENTS FOR SUBMISSION OF THESIS

13.1. Minimum two research publications in Science Citation Index (SCI) journal or Institute of Scientific Information (ISI) recognized journal are required for submission of Ph.D.thesis from the batch admitted from July 2012 onwards and for others it is desirable. The final accepted research paper in SCI or ISI journal is also be considered.

The research papers published in Social Sciences Citation Index (SSCI) and Arts & Humanities Citation Index (AHCI) can also be considered for Architecture and Humanities departments.

NOTE: Any minor correction or major revision of research paper will not be considered for the submission of thesis.

- 13.2. A scholar shall be required to deliver a pre submission seminar, and will be allowed to submit his/her thesis only if the RPC recommends.
- 13.3. Thesis should be shown to RPC members. Preferably thesis should be ready before delivering the pre-submission seminar, so RPC members will go though the facts & figures of thesis.
- 13.4. Thesis will be required to be submitted within six months from the date of delivery of pre submission seminar.
- 13.5. A candidate is required to submit 4 copies of synopsis and soft bound Ph.D. thesis along with the soft copies in PDF format to the Academic Section.

14. PH.D. THESIS EVALUATION

14.1. Thesis shall be evaluated by two examiners nominated by the Chairman Senate from the panel of examiners suggested by RPC and forwarded through the HoD. There should be one examiner from outside India (from developed country) for the batch admitting from July 2012 and for others it is desirable.

- 14.2. Candidate shall be provided a copy of detailed reports of both examiners.
- 14.3. If both the examiners give favorable reports, the candidate will be eligible for Ph.D. degree after open defense, recommendation of the Senate.
- 14.4. If the examiner(s) recommends acceptance of the thesis subject to major modifications, the thesis can be resubmitted only once after incorporating the modifications, within a period of one year. The thesis so resubmitted shall be examined by the same examiner(s).
- 14.5. If the examiner(s) recommend acceptance of the thesis with minor modifications only, the thesis is to be corrected before open defense and viva-voce. External examiner shall confirm whether corrections suggested by both examiners are included.
- 14.6. In case the report of one of the examiners is not favorable, the thesis will be sent to the third examiner. If the report of third examiner is favorable then only a candidate will be considered eligible for Ph.D. degree after open defense.
- 14.7. A candidate shall be required to defend his / her Ph.D. thesis (open defense and viva-voce) before the Board of Examiners Committee consisting of following members.
 - i) One of the Examiners of the Ph.D. thesis
 - ii) Chairman, Board of Studies of the concerned Department.
 - iii) Supervisor(s) of Ph.D. thesis.
 - iv) Director's Nominee (from amongst the Ph.D. Supervisors from other Department)

In case the examiner is unable to attend the viva-voce for any reason, the Director is empowered to nominate one expert in the field from the local area.

- 14.8. A candidate will have to submit two hardbound copies of thesis incorporating all suggestions of examiners. After successful defense, one for record, and the other for library.
- 14.9. Thesis rejected by both the examiners may be resubmitted after revision, not earlier than one year and not later than three years from the date of such intimation to the scholar by the Academic Section. The thesis so resubmitted may be examined by the same referees or by new referees.
- 14.10. Rejection of the thesis so resubmitted will disqualify the scholar from further consideration for the award of the Ph.D. degree, in the topic of research chosen by him / her.
- 14.11. On the basis of report of Board of Examiners, the Senate decides the scholar's eligibility for award of the degree of Doctor of Philosophy.

15. RECOGNITION AS A SUPERVISOR

- 15.1. A staff member of VNIT possessing Ph.D. degree will be recognized as a supervisor for Ph.D. programs at VNIT in the relevant discipline.
- 15.2. For Ph.D. guidance outside VNIT prior permission of Director is must.
- 15.3. Outside researchers shall be recognized as external Supervisor on case-to-case basis. The criteria for recognition as external supervisor shall be as under.
 - 1. Ph.D. in concerned subject.
 - 2. Ten years Teaching / Research / Industrial experience.

- 3. He / she should belong to IIT / NIT / National Laboratories / University Departments / Government Colleges.
- 4. Some scholar should have applied to work with him / her (as external supervisor).
- 5. Concerned HoD should have recommended the case.
- 6. Should have guided at least one PhD. (desirable)
- 7. Minimum five publications in National / International SCI refereed journals.

16. MAXIMUM NUMBER OF CANDIDATES A SUPERVISOR CAN GUIDE

A supervisor can have maximum 10 candidates registered under him/her for Ph.D. / M. Tech. (by Research) / M.Arch. (by Research) programs taken together at any given time. This includes both registrations at VNIT and registrations at other universities/Institutes.

17. ADDITIONAL SUPERVISOR

If the Principal Supervisor leaves the Institute for any reason he / she is permitted to work as Principal Supervisor for candidates registered before leaving the Institute. However, additional supervisor from the Institute shall be provided, if the thesis can not be submitted within calendar year.

18. CHANGE OF SUPERVISOR

The practice of change of Supervisor should be discouraged under the normal circumstances. However, any application from a candidate or the Supervisor requesting for a change if recommended by HoD may be considered and the requested change will be permitted with the approval of Director.

19. CANCELLATION OF REGISTRATION

Candidate alone or supervisor with RPC or candidate and supervisor(s) can apply for cancellation. HoD, Dean(R&C) shall recommend the cancellation to the Director. The cancellation requested will be permitted if approved by the Director.

20. ADDITIONAL RULES FOR STAFF OF THE INSTITUTE

- 20.1. A member of the academic staff who has commenced his research before joining the Institute may, on the recommendation of the Supervisor through the RPC concerned, be permitted to include in his / her period of registration, part or all of the time spent on research before joining the Institute, **up to a maximum of one year**.
- 20.2. A member of the non-academic staff of the Institute who satisfies eligibility criteria may be considered for admission to the degree as a part-time candidate provided the

Director of the Institute duly approves his/her application. This change will be permitted subject to institute policy provision at that time.

21. CONVERSION FROM FULL TIME TO PART TIME

The conversion of status from Full Time to Part Time is permitted from case-to-case basis. However, minimum period of submission of the thesis shall be governed by Part Time regulation. Other regulations shall be applicable as per the changed status. Change of status shall be permitted on formal application submitted to Dean (R&C) through supervisor and HoD. Such change shall be permitted only once during the registration period of 6 years.

22. Conversion of RA/JRF/SRF

The conversion status of research scholars working as RA/ JRF / SRF under the research projects of the departments may be permitted as Full Time research scholar with fellowship from case to case basis subject to the terms & conditions of Ph.D. admissions.