GUIDELINES AND RULES

GOVERNING

Ph.D. M.Tech (Research) M.Arch (Research) Programmes

Applicable from July 2010



Visvesvaraya National Institute of Technology, Nagpur

1. INTRODUCTION

1.1 PREAMBLE

These rules and regulations shall govern all PhD, M.Tech. (Research), M.Arch. (Research) 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.

The Institute undertakes sponsored research and development projects from industrial and other organizations in public as well as private sector.

Facilities for research work leading to the Ph.D. degree are available in the departments of Architecture, Applied Mechanics, Chemistry, Civil, Computer Science, Electrical, Electronics and Communication, Humanities, Mathematics, Mechanical, Metallurgical and Materials Engineering, Mining and Physics.

The medium of instruction in the Institute is English.

1.2. Notification for Admission

A notification for admission to Ph.D. / M.Tech.(By Research) / M.Arch.(By research) 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. Minimum and Maximum Duration for completing the program

2.1 Minimum Duration for completing the programs:

- 1. For Ph.D. (Full time) Three years.
- 2. For Ph.D. (Part time) Four Years.
- 3. For M.Tech. / M.Arch. (By Research) Two and half years.

2.2 Maximum Duration for completing programs

2.2.1 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.

2.2.2. After six years, if a candidate wishes to continue research, he / she will be required to register again. A candidate should apply for re-registration before completion of six years of registration period. If the re-registration application is received after 1st January / 1st July, a candidate will be required to register again following the procedure for fresh candidates. The re registration will be valid for a period of two years only.

3. Coursework requirement

- **3.1** 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.
- **3.2** 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.
- **3.3** Every M.Tech. / M.Arch(By Research) scholar shall be required to complete minimum 36 credits through courses recommended by his/her RPC.
- **3.4** 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.
- **3.5** Minimum CGPA requirement for the course work is 6.0. If CGPA at the end of any semester fall below 6.0, a scholar will be asked to take more courses in order to makeup required CGPA.
- **3.6** In case of Full Time Ph.D. 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.
- **3.7 Residential Requirement**: For Ph.D. (Part Time) scholar there is residential requirement for the duration of 2 semesters.
- **3.8** The course work must be completed within the first year of joining the program by Full Time scholars and within first two years of joining the program by Part Time Scholars.

4. SEMINARS DURING Ph.D WORK

- **4.1** 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.
- **4.2** 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.
- **4.3** Report of the RPC after each six monthly progress seminar shall be duly forwarded to the office of the Dean (R&D) by the concerned department, in a format available on website.
- **4.4** Six monthly seminars shall be conducted only if annual fees are paid. No further seminar shall be conducted without payment of fees.

5. Composition of RPC

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

- 1. Chairman Head of the concerned Department/ One of the senior qualified supervisors nominated by Chairman Senate, when HoD is not a qualified supervisor.
- 2. Supervisor/Supervisors.
- 3. Expert from the Department/Discipline to be nominated by the supervisor.
- 4. Expert from the Allied Department/Allied Discipline to be nominated by the supervisor.

6. Thesis Submission

- 6.1 A scholar can submit his/her thesis only after completion of minimum duration.
- **6.2** For submission of Ph.D. thesis, a candidate should have at least two papers accepted / published on his/her work in an International/National refereed Journals/ Conferences.
- **6.3** For submission of M.Tech. / M.Arch.(By Research). Thesis, a candidate should have at least one paper accepted/published on his/her work in an International/National refereed Journal/ Conference.
- 6.4 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.
- **6.5** Thesis will be required to be submitted within six months from the date of delivery of pre submission seminar.
- 6.6 A candidate is required to submit 4 copies of synopsis and soft bound Ph.D. thesis (3 for M.tech. / M.Arch.(By research)) along with the soft copies in PDF format to the Academic Section.

7. Ph.D. Thesis Evaluation

- **7.1** 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.
- 7.2 Candidate shall be provided a copy of detailed reports of both examiners.
- **7.3** If both the examiners give favorable reports, the candidate will be eligible for Ph.D. degree after open defense, recommendation of the Senate.
- **7.4** 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).
- **7.5** 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.

- **7.6** 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.
- **7.7** A candidate shall be required to defend his / her Ph.D. thesis (open defense and viva-voce) before the 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.

- **7.7.1** 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.
- **7.7.2** 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.
- **7.7.3** 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.
- **7.7.4** 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.

7.2. M.Tech. / M.Arch. (By Research) Thesis Evaluation

- **7.2.1** Thesis shall be evaluated by one examiner nominated by the Chairman Senate from the panel of examiners suggested by RPC and submitted through the HoD.
- **7.2.2** After receipt of external examiner's report, there will be a defense conducted by one examiner. Director's nominee shall be the additional member present during open defense.

8. Recognition as a Supervisor

- **8.1** 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.
- **8.2** A staff member of VNIT possessing M.Tech. / M.Arch. degree will be recognized as a supervisor for M.Tech. / M.Arch(By research). program at VNIT in the relevant discipline.
- **8.3** For Ph.D. / M.Tech. (By research) / M.Arch. (By Research) guidance outside VNIT prior permission of Director is must.
- **8.4** 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. To be recognized as External Supervisor for M.Tech. (Research) / M.Arch. (Research) he/she should be at least M.Tech. / M.Arch. Ph.D. is desirable
- 7. Should have guided at least one PhD. (desirable)
- 8. Five publications in National / International Journals out of which at least two in refereed journals. (desirable)

9. Maximum number of candidates a supervisor can guide

9.1 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.

10. 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.

11. 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.

12. CANCELLATION OF REGISTRATION

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

13. ADDITIONAL RULES FOR STAFF OF THE INSTITUTE

- **13.1** 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.
- **13.2** 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.

14. CONVERSION FROM FULL TIME TO PART TIME

The conversion of status from Full Time to Part Time is permitted. 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&D) through supervisor and HoD. Such change shall be permitted only once during the registration period of 6 years.