



Bharatiya Vidya
Bhavan



आ नो भद्राः क्रतवो यन्तु विश्वतः
Let noble every side...

Sardar Patel Institute of Technology

Munshi Nagar, Andheri (W), Mumbai-400058
(Autonomous College Affiliated to the University of Mumbai)

Ph. D. RULES AND REGULATIONS

**Doctoral Degree (Ph. D.) Program in
Engineering and Technology**

(Effective for candidates admitted from Academic Year 2021-2022)





Bharatiya Vidya Bhavan's
Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

Contents

Sr. No.	Topic	Page No.
	Preamble	2
1	The Doctoral program at SP-IT	3
2	Autonomous Ph.D. Programs	4
3	Rules & Regulations (Citation w.r.t. University norms)	8
	I. Introduction	8
	a University Affiliation	8
	b Role of Research Center SP-IT in Ph.D. Process	8
	c Supporting documents need to be submitted to SP-IT	9
	d Interaction between SP-IT Research Center and University in Ph.D. Process	9
	e Ph.D. Supervisor Approval	9
	f Vacancies	10
	II. Eligibility Criteria for the admission to Ph.D. Course	10
	III. Allocation of Supervisor	11
	IV. Course work	11
	V. Topic/Title Approval	13
	VI. Continuous Evaluation and Monitoring of the Research Work	14
	VII. Break in the Ph.D. Tenure	14
	VIII. Synopsis Submission	15
	IX. Thesis submission	15
	X. Appointment of Examiners and Thesis Evaluation	16
	XI. Defense of the Thesis – Viva-voce	18
	XII. Duration & Cancellation of the Registration	18
	XIII. Award of Ph.D. Degree	19
	XIV. Publication of Thesis	20
	XV. The Act of Plagiarism	20
	XVI. References	20



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

PREAMBLE

(Let the noble thoughts come to us from every side...)

Bharatiya Vidya Bhavan, not just a conglomeration of more than 300 institutions, but a culture, a saga, a holy journey, started by Dr. K.M. Munshi with the blessings of Mahatma Gandhi in 1938. Imparting value-based education with Indian cultural ethos has always been the motto of Bhavan. In 1957, the Bhartiya Vidya Bhavan conceived the idea of establishing an engineering college in Mumbai and it resulted in the establishment of Sardar Patel College of Engineering on 19th August 1962. This also received grant-in-aid from the Government of Maharashtra.

In 1995, self-financed engineering courses were added to it and it functioned as Sardar Patel College of Engineering (Unaided wing) from 2005 till 2008. Unaided Wing was established under the name and style of Bhartiya Vidya Bhavan's Sardar Patel Institute of Technology since 2005 and is permanently affiliated to Mumbai University, it received the autonomous status in 2017.

SP-IT is consistently ranked among top 100-150 Institutes in the country by various reputed surveys including the NIRF.

Post Autonomy, SP-IT focused on PG and Research Education, by expanding the intake of enrollment of research candidates for Ph.D. Programs across various departments and domains. As a result of a sound research base and outcome-oriented research activities, infrastructural facilities in the research laboratories have been developed.

The research philosophy is to progress from inter-departmental collaboration to inter-institutional partnerships at national and international levels and ensure that we hold on to our position at the cutting edge of innovation by encouraging interdisciplinary research. Research and Development efforts in SP-IT are geared entirely to society's needs: health, security, communication, energy and the environment. As a result, the work undertaken by our researchers and developers will have a significant impact on social life.



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

1 DOCTORAL PROGRAM AT SP-IT

(Quality is the result of intelligent effort...)

At Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology, Research is an integral part of the academic activity carried out within various undergraduate and postgraduate programs. The Research and Development (R&D) center facilitate various research programs by channelizing various research projects and consultancy works in various departments of the institute. The research activities include academic research and funded research projects and patents.

The advancement of laboratories is a key role in the research and development center of the institute. The research and development center acts as a liaison between funding agencies and the institute to handle sponsored research projects and industrial consultancy assignments. The main objective is to maintain the quality and breadth of its research enterprise and particularly for its openness to multidisciplinary research.

The scope and scale of research have substantially evolved from the era of student theses to funded projects to interdisciplinary research programs at state and national level. The center facilitates interaction with external agencies at the national and international level. By looking at changing requirements of industry, the objective of research and development cell is to forge a future while shaping technology through innovative application by improving methods and techniques and by being creative to design new products.

Institute offers Ph.D. Programs, affiliated with University of Mumbai, in four departments. The broad objective of the Ph.D. program is to keep pace with the ever-expanding frontiers of knowledge in Engineering and Technology culminating in the contemporary social and economic objectives of the country.

The academic program leading to a Ph.D. degree is based on course credit requirement and research thesis as per the guidelines of UGC. The institute also encourages research in interdisciplinary areas through a system of joint supervision by academicians or industry personnel.

The presence of a strong research-oriented faculty provides excellent opportunities for such a program. Facilities for research work leading to a Ph.D. degree are currently available in the



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

Departments of Computer Engineering, Electronics and Telecommunication Engineering, Electronics Engineering, Master of Computer Applications.

All the academic and administrative matters related to the Ph. D. center shall be supervised by Dean R&D. The records of registration and progress of research work done by the Ph.D. students shall be maintained by the Ph.D. center. Following are the research programs offered by SP-IT

1. Ph.D. in Electronics and Telecommunication
2. Ph.D. in Computer Engineering
3. Ph.D. in Electronics
4. Ph.D. in Master of Computer Applications

2 AUTONOMOUS Ph.D. PROGRAMS

(Soaring high is my nature...)

The latest UGC Regulations for Autonomous Institutes, released in February 2018, have empowered autonomous campuses to conceive and establish their own independent Ph.D. programs. The Government of Maharashtra has subsequently released the relevant addendum for autonomous colleges as statutes in the Maharashtra Universities Act-2016, in January 2019, endorsing such empowerment towards true and complete academic autonomy. Leveraging on such statutory permission by the regulatory authorities, SP-IT. has decided to start its own "Autonomous Ph.D. Programs". The institute aims to undertake sponsored research and development projects from funding agencies, research organizations and laboratories, public/private sector industries and corporate.

Terms and Definitions

UGC: University Grants Commission

AICTE: All India Council of Technical Education

UOM: University of Mumbai

SP-IT: Sardar Patel Institute of Technology

AC: Academic Council: the apex Academic Body of SPIT as an Autonomous Institute

CRRC: Central Research and Recognition Committee; the Apex Authoritative Body for Autonomous Ph.D. Programs, accountable and reporting to the Academic Council. The constitution of the CRRC is as hereunder:



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

1. Chairman - Academic Council or his nominee
2. Head of the Institute – Member
3. Institute R&D - Convener
4. Dean Academics - Member
5. Three Senior faculty nominated by the Academic Council
6. One representative from Industry /Academics
7. Dean QA - Member
8. Member: A person well versed with ERP nominated by Head of Institute
9. Respective Ph. D. Program level Research Committee (PRRC) Chairperson who will be invited for deliberations/issues related to his/her department/domain and thus would ensure that the committee has representation from each Ph. D. program.

The committee will meet a minimum of two times in an academic year tentatively in January / July.

(Tenure of committee members including the Chairman is for three years or as announced by the Head of the institute, from time to time.)

Roles and responsibilities of CRRC:

1. Identification and approval of Supervisors and Joint Supervisors.
2. Formation of a program-specific interview panel for selection of Ph.D. candidates.
3. Formation and amendments of general guidelines for Ph.D. coursework for each program as per Mumbai University/UGC guidelines and passing on the instructions to PRRC.
4. To give final approval to RPC constituted by PRRC.
5. Approval of allocation of Supervisors.
6. Approval of RPC for each candidate.
7. Approval of Pre-synopsis of Ph.D. Candidate.
8. Identify three referees for Thesis evaluation and select the referee for defense and convey them to PRRC.
9. To temporarily constitute an ethics committee after a research scholar submits Thesis.

PRRC: Program Research and Recognition Committee for each Ph. D. program, constituted as per regulations of the institute from time to time. The constitution of the RRC is as hereunder:



Bharatiya Vidya Bhavan's
Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

1. Chairman - Head of the Institute
2. Convener - Nominated by CRRC
3. Three domain experts, who are recognized as Ph.D. supervisors in the appropriate program, consisting of Professors, Associate Professors and Assistant Professors.

The committee will meet a minimum of two times in an academic year tentatively in January / July.

(Tenure of the members from two to four will be for three years or as announced by the Head of the institute, from time to time)

Roles and responsibilities of PRRC:

1. All correspondence with the University.
2. Monitoring of Ph.D. admission process.
3. Setting of paper for program-specific Entrance Test
4. Conduction of program-specific Entrance Test and declaration of results.
5. Conduction of Interviews for the selection of Ph.D. candidates.
6. Declaration of candidate's selection for a specific program as per the vacancies.
7. Provisional allocation of Supervisors within one month of the date of admission with approval from CRRC.
8. Formation of RPC for each candidate in respective program and taking final approval for the constitution of RPC from CRRC.
9. Approve the Pre-synopsis of research scholars.
10. Collect and maintain records of the research scholar including course work, registration details, SPS-APS reports, Synopsis and Thesis.
11. Communicate with an external referee for Thesis evaluation.
12. Arrange a date, time, venue of viva-voce for research scholars and collect feedback and evaluation reports.
13. Communicate to Controller of Examination to issue a provisional degree certificate.

RPC: Research Progress Committee of the Candidate. The constitution of the PRPC is as hereunder:

1. Research Supervisor - (Convener)
2. External Expert - (Member)
3. Internal Expert - (Member)
4. Joint Supervisor (if any) - (Member)



Bharatiya Vidya Bhavan's
Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

The Research Supervisor from the Institute shall be the Convener of the Research Progress Committee. In the event of the Supervisor of the Institute leaving the Institute temporarily the second/Joint- Supervisor shall be the Convener. The Research Progress Committee shall have the following responsibilities:

- To review the research proposal and finalize the topic of research;
- To guide the research scholar to develop the study design and methodology of research and identify the course (s) that he/she may have to do.
- To periodically review and assist in the progress of the research work of the research scholar.
- Pre-submission seminar conduction.
- Recommendation of thesis submission.

(Tenure of the members is coterminous with the candidate's open defense)

The supervisor shall request for an alternate member for the Research Progress Committee from the panel of experts submitted if,

- In the case of the change of Supervisor.
- Topic of research changed before confirmation of the pre-registration.
- Research Progress Committee member is away from the place of work for more than 1 year.
- Research Progress Committee member passed away.
- Member not responding to attend Research Progress Committee meetings.

In all the above cases or any other compelling reasons, the Dean (R&D) shall nominate an alternate Research Progress Committee member from the panel.

Roles and responsibilities of RPC:

1. To conduct a title approval seminar after successful completion of the course work and to convey the final title to PRRC.
2. To monitor the progress of Ph.D. candidates by conducting semester progress seminars (SPS) and Annual Progress Seminars (APS).
3. To suggest modifications for improvements in the ongoing research work.
4. To prepare an evaluation report for each candidate and submit it to PRRC for each APS.
5. To recommend and conduct a Pre-synopsis seminar and provide feedback to PRRC.



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

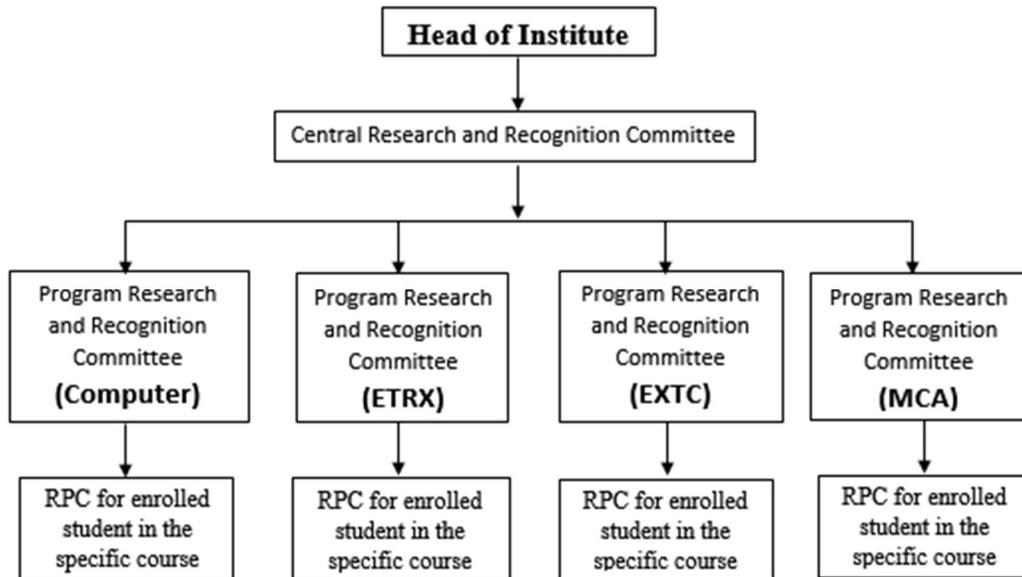


Figure 1. Flow chart for PhD

3 RULES & REGULATIONS (Citation w.r.t. University norms)

I. Introduction

a. University Affiliation

SP-IT is permanently affiliated with the University of Mumbai.

b. Role of Research Center SP-IT in Ph.D. Process

- 1) A list of admitted candidates will be submitted to the University of Mumbai from SP-IT satisfying the eligibility criteria with all supporting documents.
- 2) On successful completion of the viva voce, the following has to be sent to the University to process the research scholar's degree certificate:
 - a. Coursework mark sheet/coursework completion certificate
 - b. Documents proving successful completion of viva voce (with all supporting documents)
- 3) After completion of viva voce, the research center issues a provisional degree certificate to the candidate.



Bharatiya Vidya Bhavan's
Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

c. Supporting documents need to be submitted to SP-IT

- Admission notification
- Selection of candidates
- Coursework completion certificate
- Topic approval report
- Guide allocation certificate
- Semester-wise monthly progress seminar reports
- Pre-synopsis report
- Synopsis report
- Thesis
- Plagiarism report

d. Interaction between SP-IT Research Center and University in Ph.D. Process

1. Admission and verification of admission documents.
2. Documents requested by the university from time to time.
3. Issue of Degree to the candidate based on communication and recommendations from the SP-IT research center.

e. Ph.D. Supervisor Approval

- 1) A research guide is a recognized guide of Mumbai University.
- 2) Additionally, any full-time faculty of the SP-IT identified and approved by CRRC with at least two research publications in refereed SCI index journals with a Ph.D. degree may be recognized as Research Supervisor/joint-supervisor.
- 3) Only a full-time regular teacher of SP-IT can act as a supervisor, Joint-Supervisor can be allowed in interdisciplinary areas from other departments or other research organizations, institutes of high repute, and research-oriented industries with the approval of the CRRC. However, CRRC will have the power to decide about the relaxation of any above conditions based on research experience in research institutes like DRDO/CSIR/ISRO, etc., industry experience in R&D, or other good research credentials. An external person can only be selected as a Joint supervisor for a candidate.
- 4) In cases, where the Research Supervisor has less than three years to retire, a Joint Supervisor shall be mandatory.
- 5) The qualification of a Joint supervisor will be the same as that of the Research Supervisor and should be duly approved by CRRC.



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

- 6) If an existing supervisor wants to guide other than the parent program, the relevant research experience in the concerned domain with two refereed publications is essential, before final approval from CRRC.

f. Vacancies

- 1) The institute shall publish vacancies every year as per the vacant seats under each Supervisor as per the UGC guidelines.
- 2) A Research Supervisor/Joint Supervisor who is a Professor, at any given point in time, cannot guide more than Eight (8) Ph.D. scholars. An Associate Professor as Research Supervisor can guide up to a maximum of six (6) Ph.D. scholars and an Assistant Professor as Research Supervisor can guide up to a maximum of four (4) Ph.D. scholars.
- 3) The reservations will be as per the reservation policy of Maharashtra State.

II. Eligibility Criteria for admission to Ph.D. Course

- 2.1 Candidate should have a Master's degree in engineering and technology, the relevant discipline as per the norms of Mumbai University. Minimum passing grades scored in this examination should be less than 55% (for an open category) and 50% (for a reserved category). Candidates whose result of qualifying postgraduate degree is awaited may appear for the SP-IT entrance examination provided they have submitted the master's thesis. The admission shall be provisional and will be confirmed only if the result of the qualifying examination is submitted on or before the specified date.
- 2.2 Candidate should have either one of the following with 70% weightage in selection criteria:
 - (a) Candidate should have a valid GATE score
 - (b) Qualified PET examination
 - (c) Should qualify for SP-IT Ph.D. entrance test (SP-PET)
- 2.3 SP-IT Ph.D. Entrance Test: The syllabus of the written test shall be subject-specific as per the GATE syllabus. The test will consist of an objective paper of at least 1 hour duration consisting of a minimum of 50 marks and a minimum of 50 multiple-choice questions (MCQ) in the relevant discipline.
- 2.4 The shortlisted candidates will have to face the oral technical/academic interview before the duly constituted Ph.D. interview panel of SP-IT, which shall be given 30% weightage in the overall selection criteria.



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

Note: The Institute reserves the right to admit candidates based on merit and performance during interviews & written tests. Mere satisfaction of minimum qualification does not entitle admission to Ph.D. programs.

Constitution of Interview Panel: The interview panel shall consist of eligible supervisors belonging to the respective program, One/two external experts specific to the program, the Chairman of CRRC (Head of the Institute), and the Chairman of PRRC of the specific Program.

III. Allocation of Supervisor

- 3.1 PRRC requests three preferences from the candidates from the list of available supervisors from SP-IT within one month of admission as a research scholar, the supervisor will be allocated.
- 3.2 The allocation of the supervisor for a selected candidate shall be formally decided by the PRRC depending on the number of students per faculty member, the available specialization among the faculty supervisors, and the research interest of the student.
- 3.3. The research supervisor shall not have more than 8/6/4 candidates as per the cadre. New candidates against the vacancies shall be allocated to the supervisor only after the submission of the thesis to the university by previously registered candidates.
- 3.4 Change of Supervisor (s) under exceptional circumstances shall be permitted on the recommendation of the Dean R&D after obtaining the consent of (i) the student (ii) the present Supervisor (s) and (iii) the proposed Supervisor (s).
- 3.5 No relative of a candidate (such as wife, husband, son, daughter, sister, brother, or such other person – people, who are deemed to be close relations) shall be appointed as Research Supervisor/Joint Supervisor for the candidate.

IV. Course Work

Credit Requirements, number of courses, duration, syllabus, minimum standards for completion, etc. for the Ph.D. program shall be as mentioned in Table 1:

- 4.1 The coursework shall be treated as a prerequisite for the Ph.D. program. Ph.D. coursework shall be of minimum of 18 credits as of date. The minimum number of credits for the coursework is subject to change as mandated by the UGC, from time to time.



Bharatiya Vidya Bhavan's
Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

Table 1: Mandatory Credit Requirements for the Ph.D. Course Work

CODE	Name of the Course	Contact hours	Credits	Examination Scheme				
				MSE	ESE	ISE	Presentation	Total
PhD101	Research Methodology	6	6	20	80			100
PhD102	MOOC such as NPTEL etc.	6	6	As per the MOOC course rules				
PhD103	Seminar	4	4			50	50	100
CPE-RPE	Research & Publication Ethics	2	2			50	50	100
Total		18	18			100	100	300

- 4.2 The revision of coursework, along with its credits, shall be aligned with UGC directives/guidelines, announced from time to time.
- 4.3 All courses prescribed for Ph.D. coursework shall conform with the credit hour instructional requirement and shall specify contents, instructional and assessment methods. They shall be duly approved by the CRRC.
- 4.4. Candidates should complete coursework preferably within one year. He/she shall submit a coursework report in the prescribed format.
- 4.5 The domain-specific courses to be considered for coursework shall be recommended by the CRRC.
- 4.6 All Ph.D. candidates shall complete the Ph.D. coursework in each of the courses in the institute's grading scale (as per the following table) for successful course completion.
- 4.7 A candidate will earn credits for a Course Unit only if he obtains a minimum qualifying Grade as per the institute exam policy. Further, if a candidate fails to get a qualifying Grade, the candidate will be allowed multiple attempts. Thereafter, the final decision about the candidate will be taken by CRRC.



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

Table : Proposed Grade Definitions

Grade	Points	Definition
FF	00	All the students who have scored below half median of the class will be declared failure in the course. ($< M/2$, where M is the median of the class)
AB	09	The DAPC will study the marks obtained by the entire class and decide the score. AB grade will be awarded to that score. Let this score is S_A . S_A will not be more than top score of the class. It can be equal to or lower than the top score.
AA	10	All the students who have scores more than S_A will receive the AA.(Top Grade)
BB	08	The range between S_A and $M/2$ will be divided in 6 equal intervals and will be allotted these grades chronologically. The bottom limits for these grades will be as follows: $M/2 \dots \dots \dots DD$ $M/2+I_1 \dots \dots \dots CD$ $M/2+I_2 \dots \dots \dots CC$ $M/2+I_3 \dots \dots \dots BC$ $M/2+I_4 \dots \dots \dots BB$ $M/2+I_5 \dots \dots \dots AB$
BC	07	
CC	06	
CD	05	
DD	04	

V. Topic/Title Approval

- 5.1 A candidate shall make an application in a prescribed format for registration to Ph.D. program along with six copies of the topic registration report and evaluation Report by CRRC and attendance report.
- 5.2 One RPC will be constituted for each candidate. RPC will examine the topic approval report of the candidate and will duly approve the topic/title.
- 5.3 The candidates complete the registration formalities.
- 5.4 Provisional registration date as the confirmed date of registration subject to the satisfactory completion of coursework credits and approval by CRRC.



Bharatiya Vidya Bhavan's
Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

VI. Continuous Evaluation and Monitoring of the Research Work

- 6.1 A research scholar shall appear before the Research Progress Committee once in six months to make a presentation of the progress of his/her work for evaluation and further guidance. The research scholar shall also submit the progress report.
- 6.2 The evaluation reports of the progress shall be submitted by the RPC to the PRRC with a copy to the research scholar.
- 6.3 In case the progress of the research scholar is unsatisfactory, the RPC shall record the reasons for the same and suggest corrective measures. If the research scholar fails to implement these corrective measures, the RPC may recommend to the PRRC specific reasons for the cancellation of the registration of the research scholar.
- 6.4 RPC may recommend the research scholar to proceed for pre-synopsis based on the completion of the research work.

VII. Break in the Ph.D. Tenure

If due to some reasons, a Ph.D. candidate would like to seek a break in the research program for some duration, the following points are noted:

- 7.1 The candidate has to write to PRRC through RPC with the consent of the research supervisor / joint supervisor (if any).
- 7.2 The matter will be taken up in the PRRC regular meetings and shall be forwarded to CRRC.
- 7.3 The CRRC in their meetings shall approve the break in the course, a minimum of one year not exceeding more than two consecutive academic years. If the break in the study is sanctioned by CRRC, no tuition fees shall be charged by the Institute administration during the break period.
- 7.4 After the break period, the candidate must intimate the supervisor and obtain due consent from all the relevant research committees.



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

VIII. Synopsis Submission

- 8.1 The Candidate shall be permitted to submit the Synopsis to PRRC subject to the confirmation of registration and the following conditions.
- 8.2 A minimum of ONE paper published/accepted for publication in refereed journals of repute and at least one paper published/accepted for publication in the proceedings of an International Conference.

OR

At least one Patent should be published and at least one paper published/accepted for publication in the proceedings of an International Conference

- 8.3 In all the above publications the first author should be Research Scholar followed by Supervisor and Joint Supervisor if any. Other members of the research group who may have contributed to the research may be included as co-authors.
- 8.4 Publication must include the research center name in the affiliation. All publications arising out of research at SP-IT must acknowledge SP-IT while submitting a paper of publication in the Journal or Conference. Otherwise, such publications shall not be considered for submitting the thesis.
- 8.5 The RPC gets approval from PRCC and recommends a pre-synopsis presentation which is open to all research scholars and faculty members. After a successful pre-synopsis presentation, the scholar can proceed to submit the Synopsis. The examiners may
 1. Recommend for submission
 2. Corrections to be made and resubmission
 3. Corrections to be made in consultation with the supervisor.
- 8.6 It is mandatory to submit six copies of the corrected synopsis (with spiral bound) incorporating all suggestions given by the committee within the time of one month from the date of the pre-synopsis presentation.
- 8.7 Research scholars will submit the synopsis to the PRRC.

IX. Thesis submission

- 9.1 Before submission of a Ph.D. thesis, every scholar shall fulfill the requirements prescribed by the research center concerning the detection of plagiarism and any other forms of academic dishonesty. While submitting for evaluation, the thesis shall be accompanied by an original report of the anti-plagiarism software approved by the PRRC, an undertaking from the research scholar about the originality of the work,



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

- vouching that there is no plagiarism and any other academic dishonesty and that the work has not been submitted for the award of any other degree/diploma of the same institution where the work was carried out, or to any other institution.
- 9.2 The scholar shall be allowed to submit his/her thesis two months after the submission of the synopsis. If the candidate fails to submit his / her draft thesis within six months of synopsis submission, the candidate will have to pay the prescribed fine for a late submission. Late submission of the thesis shall be allowed up to the completion of six months from the date of submission of the synopsis. The candidate will have to submit a synopsis again if the submission is extended further, moreover, the college fees in full (except tuition fees), will be payable beyond the academic year period i.e. after 30th June, if the thesis is submitted after 30th June.
- 9.3 In an organized fashion, the thesis shall report an account of the original work of the candidate leading to the discovery of new facts or techniques or correlation of facts already known (analytical, experimental, hardware-oriented etc.) and demonstrating a quality as to make a definite contribution to the advancement of knowledge and the candidate's ability to undertake sustained research and appropriately present the findings, with actual accomplishments of the work, plainly stated and honestly appraised.
- 9.4 The thesis shall be submitted in the compact spiral bond form as well as soft copy form enabling the scholar to incorporate changes if suggested by the referees.
- 9.5 The candidate shall submit to the research center, four copies of his/her thesis and produce an acknowledgment of the admission fee receipts of all years. (Refer to the template of the Thesis on the Institute's website.)
- 9.6 If a candidate fails to submit the thesis within the prescribed program duration, PRRC shall examine such cases to approve/disapprove the submission of the thesis accordingly.

X. Appointment of Examiners and Thesis Evaluation

- 10.1 The procedure for the appointment of examiners shall be undertaken soon after the scholar submits his/her synopsis.
- 10.2 The supervisor shall forward seven hard copies and a soft copy of the approved synopsis & thesis to the PRRC along with a pool of examiners (referees). A pool of 9 examiners (Three from outside India, three from outside Maharashtra and three from within Maharashtra) will be prepared by the Supervisor and submitted to PRRC.
- 10.3 From the pool, PRRC shall select three referees from the above pool (one within Maharashtra, one outside Maharashtra and one outside of the country). PRRC shall



Bharatiya Vidya Bhavan's
Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

- take approval from the CRRC and communicate to the concerned referees through an official channel. The choice of a foreign referee shall not be considered mandatory for the Thesis evaluation. The choice of the foreign referee shall be taken up by PRRC if the committee feels necessary with the consent of the Supervisor.
- 10.4 The research center shall invite these examiners from the approved panel to examine the synopsis. When the examiners accept the invitation and the candidate has submitted the thesis, the research center shall forward the thesis to the examiners within a week from the date of the receipt of the acceptance letter or the submission of the thesis, whichever is later. If an examiner does not accept the invitation within thirty days from the date of dispatch of the invitation letter, the invitation shall be sent to the next examiner on the panel as selected by the PRRC.
 - 10.5 The external examiners shall independently send their reports to the research center within sixty days from the date of receipt of the thesis. The reports sent by fax or e-mail will be accepted. The referee's comments are invited in the prescribed format. If an examiner fails to do so, the PRRC shall send him/her a reminder immediately after the expiry of the said period and request him/her to submit the report within thirty days. If the examiner concerned fails to comply even within the extended period, the PRRC shall cancel his appointment forthwith and invite the next examiner from the approved panel to evaluate the thesis. In the event of a request for the late submission of a report, receipt of the report after the appointment has been canceled or the loss of report, postal delay, etc. the PRRC concerned shall take an appropriate decision in the interest of the candidate concerned.
 - 10.6 The two positive reports with the specific recommendations of the conduction of the viva-voce examination received from the external examiner shall be intimated to the supervisor and PRRC. Defense of the thesis shall be arranged on the earliest suitable date in consultation with all concerned examiners with due approval from PRRC and CRRC.
 - 10.7 In the case where one out of three examiners gives unfavorable reports, the PRRC shall get the thesis examined by an additional examiner from the panel of examiners.
 - 10.8 If the additional examiner also gives an unfavorable report the candidate will be suggested to extend the research work and resubmit the Thesis. PRRC will send the re-submitted Thesis to the same examiners.



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

XI. Defense of the Thesis – Viva-voce

- 11.1 The day, date, time and place for the viva-voce and the defense of the thesis shall be notified by the supervisor at least eight days in advance. Normally the viva voce and the defense of the thesis shall be arranged in the institute. In exceptional cases, the PRRC may allow the viva to be conducted at a place outside the institute. In such a case the procedure and norms for the conduct of viva, payments, etc. shall be as laid down by the institute.
- 11.2 The defense of the thesis shall take place in the presence of the Research Supervisor (internal examiner), one external examiner and the Chairperson, who shall jointly evaluate the performance of the candidate. In case of dispute, the Head of the Institute shall make an appropriate decision.
- 11.3 If an external referee is unable to be present at the time of the defense, the defense shall be postponed.
- 11.4 The examiners present for the viva-voce and the defense of the thesis shall submit to the PRRC along with their final consolidated signed report. This report shall incorporate the reply given to the queries raised by the external examiners in written form, signed and accepted by the members of the Viva-Voce panel, and a list of persons attending the open defense in respect of the award of the Ph.D. degree immediately after the defense is over.
- 11.5 In case the defense is not satisfactory, the examiners can unanimously recommend with reasons that a fresh viva-voce and defense of the thesis be organized within not less than one month. If the defense is still not satisfactory, the panel will record the reasons for the same. The committee may suggest resubmission of the thesis to the same committee with suggested changes or recommend the rejection of the thesis.
- 11.6 The entire process of evaluation of the Ph.D. thesis shall be completed within six months from the date of submission of the thesis.
- 11.7 The scholar should submit the two hard-bound copies of the final Thesis to the supervisor and library of the Institute.

XII. Duration and Cancellation of Registration

- 12.1 The duration of Ph.D. program shall be a period from the date of admission to the program to the date of submission of the thesis for the degree.
- 12.2 Ph.D. program shall be of a minimum duration of three years and a maximum of six years



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

- from the date of admission, including coursework.
- 12.3 Extension up to a maximum period of four semesters/two years shall be given by the CPRCC on the recommendation of the Supervisor and the respective PRRC. The candidate concerned shall apply in the prescribed format for extension through his/her research supervisor three months before the expiry of the registration period.
- 12.4 No candidate shall be permitted to extend the duration of Ph.D. program beyond TEN years from the date of admission, and after this period the registration of the candidate shall be deemed to have ceased.
- 12.5 Candidate has to re-register if he/she fails to submit the Thesis within eight years from the date of admission.
- 12.6 **The Registration is liable for cancellation administratively by the Dean Academics if:**
- 12.6.1 The candidate has not paid the semester/annual fees within the stipulated time with the necessary fine.
- 12.6.2 The three consecutive six-monthly progress reports are not submitted or not satisfactory.
- 12.6.3 RPC is not satisfied with the performance and accordingly recommended for cancellation.
- 12.6.4 The candidate wishes to withdraw from the program and wishes to cancel his / her registration.
- 12.6.5 The candidate has not acquired appropriate credits of coursework within two years of the provisional registration.
- 12.6.6 On the moral turpitude/ disciplinary grounds of the candidate.
- 12.6.7 In all the above cancellation cases the fees paid by the candidate shall not be refunded.

XIII. Award of Ph.D. Degree

- 13.1 After satisfactory completion of Viva-voce/defense the provisional result shall be officially declared by the Controller of Examination within eight days from the date of the receipt of the favorable report on the defense of the thesis. A provisional "Passing Certificate" may be awarded to the Ph.D. scholars in the annual Graduation ceremony of the institute. Lists of all such SUCCESSFUL candidates will be recommended by the Academic Council to UoM for the award of a Ph.D. degree in its convocation ceremony.
- 13.2 After satisfactory completion of the defense the candidate should submit a hardbound copy of the thesis and a soft copy in CD and notification of the declaration of the result of a Ph.D. program to the institute library. The institute library shall further prepare metadata of the thesis and shall submit an electronic



Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous Institute Affiliated to University of Mumbai)

copy of the thesis to ONFLIBNET for hosting the same to make it accessible to all institutions/colleges.

XIV. Publication of Thesis

The Thesis as a whole shall not be published by the candidate.

XV. The Act of Plagiarism

- 15.1 In the case of candidates who have copied a thesis for a Ph.D. degree his / her thesis shall be forfeited and his / her research registration shall be terminated in this institute and also, he/she shall be debarred to register for any other program in this institute. A maximum of 10% similarity, as adjudged and certified by an authenticated plagiarism software (such as Turnitin, Grammarly, Quetext etc.) shall be permitted, as complying with guidelines from UGC/UoM, in this regard.
- 15.2 For the abatement of the above such action, the recognition of his / her supervisor shall be withdrawn for 2 years and he/she shall be debarred from guiding the candidates for any research program in this institute till such period.

XVI. References

1. UGC Gazette Rules and Regulations, Ph.D. Coursework under faculty of technology 11th July 2009.
2. University VCD Mumbai, Revised rules for Ph.D. vide circular no.406 / 2009 dated 29th Dec 2009.
3. UGC regulations 5th May 2016.
4. Time to time amendments AC-11-9-12, AC-30-9-2016, DBOEE/ICF/19-20/27.
5. VCD/947/ and 13th July 2021.
6. VJTI Rules and Regulations.
7. COEP rules and Regulations.