

NATIONAL BRAIN RESEARCH CENTRE

(Deemed-to-be-University)
NH-8, Nainwal Road, Manesar- 122 052
Haryana

REGULATIONS for the Ph.D. PROGRAMME

(Approved in the 10th Academic Council Meeting held on 29th June 2020)

1. DESIGNATION OF THE DEGREE

The Ph.D. degree awarded shall be designated as Doctor of Philosophy of the National Brain Research Centre. The certificate shall indicate the title of the thesis.

2. ADVERTISEMENT/NOTIFICATION

The Ph.D. course will commence in August every year. The admission process will be advertised in National dailies as well as on the NBRC Website.

3. ELIGIBILITY FOR APPLICATION FOR THE PH.D. COURSE

A candidate seeking admission to the course of study leading to the award of Doctor of Philosophy must have the following qualifications:

- I. Must have secured a minimum of 55% marks (or equivalent in the GPA system) throughout the academic career starting at 10th grade onwards.
- II. Possess at least one of the following qualifications from a university recognized by the University Grants Commission or other Government recognized regulatory body for Higher Education.
 - a. Master's degree in any branch of Science such as Biology / Physics / Chemistry / Mathematics / Statistics / Computer Applications / Pharmacy / Veterinary Science / Psychology or equivalent.
 - b. Bachelor's degree in Engineering / Technology / Medicine or equivalent / B Pharm (four years course)
 - c. Master's degree in Engineering / Technology / Medicine or equivalent.

Note: Candidates appearing for the final year of qualifying examination are eligible to apply.

4. REQUIREMENTS FOR ADMISSION OF FOREIGN NATIONALS

Foreign nationals seeking admission to NBRC must fulfill all the eligibility requirements for Ph.D. described above. In addition, they must satisfy all the conditions required by the University Grants Commission, Department of Biotechnology, and Govt. of India. Foreign nationals will be admitted on a regular basis only after approval of the Governing Council of NBRC.

5. METHOD OF SELECTION

Selection will be based on one or more interviews, which may be preceded by a national level entrance test.

Candidates who have qualified in CSIR / UGC / ICMR / ICCSR / DBT-JRF or any other

equivalent national level qualifying examination for Ph.D. as decided by the Chairman, Board of Studies are exempt from appearing for the entrance test. They may be called for the interview subject to fulfilling other requirements. NBRC may decide to hold a test of these candidates for short-listing them for interview.

6. RESEARCH TRAINING PROGRAMME

Candidates selected for Ph.D. will be provisionally admitted to the Ph.D. Course. The student shall work under the supervision of Course Coordination Committee till the time a Research Supervisor is assigned. The Research Training Programme will consist of coursework and a laboratory rotation program. Every Ph.D. student will have to satisfactorily complete the Research Training Program of NBRC.

The Research Training Programme for Ph.D. should ordinarily be completed within one year of joining NBRC. A further period of six months may be allowed with prior approval of the Chairman, Board of Studies on recommendation of the Course Coordination Committee. Any further delay is to be considered by the Board of Studies, on the merits of the case.

7. FELLOWSHIP

The admitted candidates may be given a fellowship as approved for the Ph.D. program by the Governing Council of NBRC. The Fellowship will be awarded during one year of the Research Training Programme and five years of the regular registration period.

In case a student after due approval from Chairman, Board of Studies, takes a leave of absence from the program during the Research Training Program or during the research work due to health issues or other personal reasons, Chairman, Board of Studies can exclude that period from the duration of the fellowship on recommendation of the Course Coordination Committee or the Doctoral Committee as the case maybe.

8. COURSEWORK

- a) Coursework will consist of a set of courses, prescribed by the Board of Studies and will be compulsory for every student who wishes to register for Ph.D.
- b) Students will require a minimum attendance of 75% in every course to appear for the examination. Students who do not fulfill the mandatory requirement, will not be permitted to appear for the final examination in that subject. Such students will have to repeat the particular course during the subsequent year by fulfilling minimum attendance. In exceptional cases, attendance requirement may be waived by the Chairman, Board of Studies on the advice of the Course Coordination Committee on personal grounds such as personal medical reasons or bereavement in the immediate family on production of a valid proof thereof.
- c) Candidates may be permitted to take courses over and above these prescribed courses on the specific recommendation of the Course Coordination Committee. Such courses should have prior approval of Board of Studies.
- d) Final examination paper at the end of each semester will be set by the course supervisor in consultation with other course instructors, if any. A moderating committee comprising of the course instructor and two other faculty members will approve the exam papers.
- e) For successful completion of the training program, a candidate should obtain at least

50% of the aggregate marks in every course, and an aggregate of 55% in the entire course work.

- f) If a candidate fails to obtain at least 50% marks in one or two courses, he/she may be allowed to appear for a supplementary exam. If he/she fails in the supplementary exam(s) they will be disqualified from the program.
- g) If a student fails to obtain at least 50% marks in three or more courses, the student will be disqualified from the programme.
- h) If for some genuine reason(s), a student has to drop course(s) during the course work programme, he/she can take the course when it is offered next in the following academic year, after approval from the Chairman, Board of Studies on recommendation of the Course Coordination Committee.
- i) Candidates, who do not qualify in one or two courses, will be granted provisional registration till the time they appear and qualify in the exam whenever it is held next.
- j) A Comprehensive viva-voce will be held at the end of the course work which the students must pass before they are allowed to registrar for the Ph.D. programme.
- k) A student who failed in any subject in the coursework is not eligible for appearing in the comprehensive viva-voce.
- l) If a student fails in the comprehensive exam, he/she will be permitted to appear for the exam again which will not be held earlier than two months after the first attempt.
- m) The student who fails twice in the comprehensive viva-voce will be disqualified from the programme

9. ROTATION PROGRAMME

Ph.D. students will undergo Lab-Rotation in different laboratories to get an exposure and research training in different aspects of neuroscience. The details of the rotation such as the numbers and durations of the rotations will be decided by the Course Coordination Committee and approved by the Chairman, Board of Studies.

The students should submit a concise project report after the Rotation in each lab. Lab-Rotation will be followed by a viva-voce exam. Lab-Rotation is a part of the course work and qualifying it is mandatory. Any candidate failing in the Lab-Rotation training is required to repeat it as directed by the Course-Coordination Committee in consultation with the Lab-Supervisor. On recommendation of the Course Coordination Committee, the rotation can be repeated in a different laboratory working in the similar area of research. This change will require approval from Chairman, Board of Studies.

10. APPOINTMENT OF RESEARCH SUPERVISOR

On successful completion of the Research Training Programme, each student will be required to give 3 choices of the research supervisors in the order of their preference. The final assignment of the Research Supervisor will be done by the Chairman, Board of Studies based on the candidate's research interests and the availability of space and requirements in the intended supervisor's laboratory. Chairman, Board of Studies may decide to select the supervisor in consultation with the faculty concerned. Decision of the Chairman, Board of Studies in this regard will be final.

11. CANDIDACY AND REGISTRATION

After successful completion of the Research Training Programme and assignment of the Research Supervisor, the student will be allowed to Register for the Ph.D. Program. List of

such qualified students will be presented for approval to the Board of Studies by the Registrar.

Chairman, Board of Studies can grant provisional Registration which must be ratified by Board of Studies in its subsequent meeting.

12. COURSE COORDINATION COMMITTEE

Chairman, Board of Studies shall appoint a Course Coordination Committee consisting of four members of the NBRC faculty. Two of the committee members may be changed every year. This committee will look after the academic activities and advise the Chairman, Board of Studies whenever necessary. Registrar will be the ex- officio member and will coordinate the meetings of the Course Coordination Committee.

13. FORMATION OF DOCTORAL COMMITTEE

Within six months of the candidate's registration, the Research Supervisor of the candidate will recommend to the Chairman, Board of Studies, a panel of members for the Doctoral committee for the candidate. The Doctoral committee shall include the Research Supervisor, a Co-supervisor and two other faculty members of NBRC. In addition, a maximum of one faculty member from other recognized teaching/research Institutions may be invited to be a part of the committee. The Doctoral Committee will monitor progress of the student, approve the research proposal and also recommend the suitability of the research work for submission of the thesis.

In case of protracted leave of absence of the Research Supervisor, the Co-Supervisor will take over the responsibilities of Research Supervisor.

14. SUBMISSION OF THE RESEARCH PROPOSAL

After the Doctoral committee has been appointed by the Chairman, Board of Studies, the candidate shall prepare a detailed research plan stating his/her objectives and methodology to be employed.

The research proposal shall be submitted to the Doctoral Committee within two year of registration and the Doctoral Committee will examine and approve the research proposal. The registration of Ph.D. of those candidates who do not submit the research proposal within two years of registration shall stand cancelled.

15. ASSESSMENT OF THE WORK OF THE CANDIDATES

- a) The progress of the candidate shall be assessed at least once every year by the Doctoral Committee and a report submitted to the Registrar. The committee may decide to meet and report more frequently if there are any concerns about the candidate's progress.
- b) If report of the Doctoral Committee is not received by the due date, after a grace period of 10 days, the Fellowship of the candidate will be suspended. The fellowship will be restored only after the report is received by the Registrar. No fellowship will be paid for this interim period.
- c) In case the Doctoral committee reports in two consecutive reports that the candidate's progress is unsatisfactory, the Chairman, Board of Studies may then warn the candidate and give him/her one more chance to improve his/her work during the next six months.

In case at the end of this period, the Doctoral Committee finds that the work of the candidate is still unsatisfactory, the candidate's registration will be cancelled.

16. CHANGE OF RESEARCH SUPERVISOR

Change of Research Supervisor may be permitted provided it is recommended by the Doctoral committee of the candidate concerned and approved by the Chairman, Board of Studies. Such changes shall be allowed only in exceptional circumstances and ordinarily only once during the program.

17. DURATION OF THE PH.D. PROGRAMME

The duration of Ph.D. course will be the time period from registration for the Ph.D. programme to submission of the thesis. The minimum period of registration before the student can submit the PhD thesis shall be two years. In exceptional cases requirement of minimum registration period of two years can be waived by the Chairman, Board of Studies. The maximum period of registration shall be five years, which may be extended by one year in exceptional cases by the Chairman, Board of Studies. No Fellowship will be tenable during the period the extended registration.

If a student is unable to submit the thesis during the extended registration period, he/she may be allowed to register again on approval of the Vice Chancellor/Director on recommendation of the Chairman, Board of Studies. This will be treated as a fresh registration and he/she will be permitted to submit the thesis only two years after registration. The student will not be entitled to any fellowship during this period.

The women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration of Ph.D. for up to 240 days. This period of absence will not count towards the initial registration period of five years or in the eligible duration of the fellowship.

18. RE-REGISTRATION

In case a student on recommendation of the Doctoral Committee and after due approval from the Chairman, Board of Studies, takes a leave of absence from the Ph.D. program for some extraordinary reason, he/she may be permitted to deregister, and then re-register after his/her return. Deregistration will be permitted only in exceptional circumstances, and will require approval of the Chairman, Board of Studies. Depending upon the reasons for the request, period of absence will be for a predetermined period, which cannot be extended once granted. This period will not be counted towards the initial registration period of five years.

19. HOLDING OF OTHER POSITIONS

During the period a student is registered for Ph.D., she/he cannot hold any other position at NBRC that provides full time or part-time financial compensation. They can however avail of short-term fellowship especially meant for Ph.D. students, such as various overseas short-duration fellowships. This will require approval of the Chairman, Board of Studies on recommendation of the Doctoral Committee of the student. Since such visits are to be undertaken for the research work related to the candidate's thesis proposal, this period will be counted towards the duration of the registration period.

20. THESIS AND EXAMINATIONS

- a) A thesis cannot be submitted without the express approval of the Doctoral committee.
- b) Each candidate for the award of the degree of Doctor of Philosophy shall submit one digital copy and at least one hard copy of his/her thesis for NBRC library. Additional hard copies may be required to be submitted as directed by the Registrar. The thesis will carry a declaration as per Annexure 1 by the student that the work presented is his own original work, and the entire thesis does not contain any plagiarized material. The Research Supervisor shall certify that the work done by the candidate is original and carried out at NBRC under his/her supervision with the counter signature of the Director, NBRC. This Certificate will be as per the format specified in Annexure 2.
- c) The Research Supervisor shall suggest a panel of examiners to the Chairman, Board of Studies, one year before the expected date of submission of the thesis. The suggested panel should include eight examiners from institutions other than NBRC who, on the basis of their published work, are leaders in the field of study undertaken by the candidate. The panel will be approved by the Chairman Board of Studies, and ratified by Board of Studies.
- d) The Chairman, Board of Studies shall appoint a board of three examiners for assessment of the thesis. One of them shall be the Research Supervisor of the candidate, who shall act as the Chairman, Board of Examiners. In the absence of the Research Supervisor, the Co-Supervisor shall act as the Chairman, Board of Examiners. The other two will be external examiners from the approved panel of examiners as per 20(c) above. The external examiners will be from different institutions, and at least one of them will be from outside Haryana. If an external examiner is not able to assess the thesis within a reasonable time for any reason, alternative examiner may be appointed by the Chairman, Board of Studies.
- e) A synopsis of the thesis should be submitted to the Doctoral Committee when the student is in the finishing stage of his / her research work, prior to submission of the thesis to the Board of examiners. After approval of the synopsis by the Chairman, Board of Studies on recommendation of the Doctoral Committee, the student can submit the thesis.
- f) If one of the examiners rejects the thesis, it will be referred to another examiner from among the approved panel. In case this examiner approves the thesis, it will be considered approved. If this examiner also rejects the thesis, the case will be referred to the Arbitration Committee to be appointed by the Chairman, Board of Studies. The Arbitration Committee will discuss the reports with the Doctoral Committee of the student and may recommend resubmission of the thesis with extensive revisions. Alternatively, the Committee might recommend rejection of the thesis, in which case registration of the student will be cancelled.
- g) If both the external examiners reject the thesis, the thesis will stand rejected and the registration of the student will be cancelled.
- h) If the internal examiner, who is the Research Supervisor of the student, rejects the thesis, it will be referred to the Arbitration Committee. The committee will discuss the case referred to it and give its recommendation to the Director regarding the future course of action.
- i) The Ph.D. Arbitration Committee shall consist of following members:
 - (i) Two Faculty Members of NBRC (who are at least Scientist VI/Professor level and are not members of the Doctoral Committee of the student) In case Chairman, Board of Studies happens to be the Supervisor of the student

whose thesis has been rejected, Chairman, Scientific Advisory Committee, NBRC shall nominate the Faculty Members.

- (ii) the Research Supervisor of the student and
 - (iii) the Registrar, NBRC, who will be the ex-officio member of the committee.
- j) If one or more examiner(s) recommend revision of thesis, it may be revised accordingly. After modifications, the resubmission shall be done within a period to be decided by the Chairman, Board of Studies. If a report from any of the external examiners is not received within three months, a copy of the thesis can be sent to another examiner from amongst the approved panel to be decided by the Chairman, Board of Studies.
- k) After receipt of satisfactory reports on the thesis from all the examiners, the student will make a formal presentation of the thesis to the faculty and students of NBRC in an open presentation. This will be followed by a viva-voce examination which will be conducted by a board consisting of the Research Supervisor, Co-Supervisor and one of the external examiners of the thesis. Other Doctoral Committee members may choose to be present for the viva-voce examination.

Under extraordinary circumstances where any of the external examiners cannot be present at the viva-voce examination, the Chairman, Board of Studies may appoint another external substitute examiner from the panel recommended by the Doctoral Committee.

21. AWARD OF THE PH.D. DEGREE

After the candidate successfully completes the Viva-Voce examination and unanimous recommendation from the Board of Examiners, NBRC shall award the degree of Doctor of Philosophy (Ph.D.).

22. POWER TO AMEND THESE RULES

Power to amend these rules shall lie with the Academic Council of NBRC.

DECLARATION BY CANDIDATE

I, _____ hereby declare that the work presented in the form of this thesis was carried out by me under the guidance of _____. Division of _____ **National Brain Research Centre (Deemed to be University)**, Manesar, Haryana, India.

I declare that no part of the thesis contains any plagiarised material. Any previously published or other material sourced from anywhere else has been appropriately attributed to the source.

I also declare that no part of this thesis has been previously submitted for the award of any degree of diploma to **National Brain Research Centre (Deemed to be University)** or to any other university.

Place : Manesar

(Name and Signature of the candidate)

Date :

CERTIFICATE

This is to certify that the thesis entitled “_____” is the result of work carried out by _____ in the Division of _____ National Brain Research Centre, Manesar, Haryana, India, towards requirements for a Ph.D. degree.

The work presented herein is original and has not been submitted previously for the award of any degree or diploma to **National Brain Research Centre (Deemed to be University)** or to any other University. The work is as per the guidelines given by **National Brain Research Centre (Deemed to be University)** and is a record of the candidate’s own efforts.

(Supervisor’s name and signature)

(Director, NBRC)

Place : Manesar

Date :