

REGULATIONS FOR INTEGRATED PH.D PROGRAMME

1. DESIGNATION OF THE DEGREE

The Integrated.Ph.D Neuroscience Programme shall lead to awarding two degrees on successful completion of the course

1. Master of Science in Neuroscience of the National Brain Research Centre.
2. Doctor of Philosophy of the National Brain Research Centre.

2. ELIGIBILITY FOR APPLICATION FOR THE INTEGRATED Ph.D. COURSE

A candidate seeking admission to the course of study leading to the award of Master of Science and Doctor of philosophy in Neuroscience must possess at least one of the following qualifications from a university recognized by the competent authority governing in the respective areas with consistently good academic record.

1. Candidates securing 55% throughout the academic career starting at 10th grade will be considered.
2. Bachelor's degree in any branch of Science such as Biology / Physics / Chemistry / Mathematics / Statistics / Computer Applications / Pharmacy / Veterinary Science / Psychology or equivalent.
3. Bachelor's degree holders in Engineering / Technology / Medicine or equivalent.
4. Candidates awaiting results of the final year examination are also eligible to apply. Candidates have to provide proof of having passed the qualifying examination at the time of interview.

3. REQUIREMENTS FOR ADMISSION OF FOREIGN NATIONALS

Foreign nationals seeking admission to NBRC must fulfill all the eligibility requirements for Int.Ph.D described above. In addition, they must satisfy all the conditions required by the University Grants Commission, Dept.of Biotechnology and Govt. of India.

4. METHOD OF SELECTION

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

5. COURSEWORK

During the 1st Year the Integrated.Ph.D programme shall include coursework, practicals and laboratory assignments as prescribed by competent authorities of NBRC from time to time. Every research student shall undertake and satisfactorily complete all the courses, practicals / laboratory assignments.

- a) Course work will consist of a set of courses prescribed by the Board of Studies and will be compulsory for every student who registers for Int.Ph.D.
- b) Students should have a minimum attendance requirement of 75% in every course. Students who do not fulfill the mandatory requirement, will not be permitted to appear

for the examination(final) in that subject, unless they repeat the course during subsequent year by fulfilling minimum attendance.

- c) Course work will be divided into 2 semesters.
- d) Final examination paper at the end of each semester will be set by an examiner from a panel recommended by the Academic Committee and approved by the Chairman, Board of Studies. There will be a board of examiners consisting of the concerned course Instructor and 2 other faculty members of NBRC also recommended by Academic Committee and approved by the Chairman, Board of Studies for moderating the paper.
- e) For successful completion of the Int.Ph.D programme, a candidate should obtain at least 50% of the maximum marks in each course.
- f) If a candidate fails to obtain at least 50% marks in a course, he/she may be allowed to appear for a supplementary exam. If he/she fails in this exam he will be disqualified from the programme.
- g) If he/she fails again in the same course during the supplementary exam he /she will be disqualified from the programme.
- h) If for some genuine reason(s), a student has to drop course(s) during the training programme he/she has to take the course when it is offered next within the following academic year, as recommended by Academic Committee and approved by Chairman, Board of Studies.
- 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 next exam.
- j) If a candidate fails in more than two courses he/she will not be allowed to register for Int. Ph.D.
- k) Candidates may be permitted to register for courses over and above these prescribed courses on the specific recommendation of the Faculty-in-Charge
- l) Scholarships given to Int.Ph.D. students will be limited to 2 + 5 yrs from the date of joining. Extensions may be considered by the Chairman, Board of Studies, on the merits of the case.
- m) A Comprehensive viva-voce will be held at the end of the first year which the students must pass. The students who failed twice in the comprehensive viva-voce will be disqualified from the programme. A student who failed in any subject in the course work is not eligible for attending the comprehensive viva-voce.

6. PRACTICALS / ROTATION PROGRAMME

Integrated Ph.D students will undergo practicals as per the syllabus. In one Semester the integrated Ph.D students will undergo practicals in one of the Systems Labs. In the other Semester the students will undergo practicals in one of the Molecular Labs. The students should submit a concise project report after the Practical / Rotation in each lab. Practical will be followed by a viva-voce exam. Practical / Lab-Rotation is a part of the course work and qualifying it, in both the semesters, is mandatory. Any candidate failing in this Practical / Lab-Rotation is required to repeat it as directed by the Lab-Supervisor concerned and qualify it. The student need not rotate in the same lab.

7. ACADEMIC COMMITTEE

Director shall appoint an Academic 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 Director whenever necessary. Registrar is the ex-officio member and will coordinate the meetings of the Academic Committee.

8. APPOINTMENT OF RESEARCH SUPERVISOR & CO-SUPERVISOR

On successful completion of the course work, 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 Director based on the candidate's research interests and the availability of space and requirements in the intended supervisor's laboratory. Decision of the Director in this regard will be final.

In exceptional circumstances change of Research Supervisor may be permitted provided it is recommended by the Academic committee and approved by the Chairman, Board of Studies.

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

9. DURATION OF THE INTEGRATED PH.D. PROGRAMME

The duration of programme will be the time period from registration for the Int.Ph.D. programme as provided below to the submission of the thesis. The minimum duration of the programme shall be two years, and the maximum duration shall be six years. In exceptional cases, these durations can be changed on the recommendation of the Academic Committee and by the Chairman, Board of Studies.

10. REGISTRATION

On successful completion of the course work and the assignment of a research supervisor, the candidate shall be eligible to register for Ph.D with NBRC(Deemed University), which will be approved by Board of Studies.

11 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 consist of the supervisor, co-supervisor and two more members of NBRC. In addition, one faculty member from another recognized teaching/research Institute may be invited to be a part of the committee. The Doctoral Committee will monitor the progress of the student, evaluate the research proposal and also advise regarding the submission of thesis.

12. SUBMISSION OF RESEARCH PROPOSAL

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

The research proposal shall be submitted to the Doctoral committee within one year of registration and the committee will recommend the feasibility of the research plan recommending modifications as they seem fit. The Ph.D registration of those candidates who do not submit the research proposal within 2 years of registration shall be cancelled.

13. ASSESSMENT OF THE WORK PROGRESS OF THE CANDIDATES

- a) After the approval of the research proposal by the Doctoral Committee the candidate shall submit a yearly progress report to the Doctoral committee.
- b) Depending on the progress, the Doctoral committee may ask for more frequent progress reports.
- c) Research Supervisor will report to the Board of Studies whether the progress of a candidate's work is satisfactory / unsatisfactory.
- d) If two consecutive reports of the candidate's progress are unsatisfactory, the Chairman, Board of Studies may give him/her one more chance to improve his/her work during the next six months. At the end of this period, if the work of the candidate is still unsatisfactory, the candidate's registration will be cancelled.

14. THESIS AND EXAMINATIONS

- a) A thesis may be submitted with the express approval of the Doctoral committee.
- b) Each candidate shall submit five copies of his/her thesis. The Research Supervisor shall certify that the work done by the candidate is original and carried out under his/her supervision with the counter signature of the Director of NBRC.
- c) The Research Supervisor in consultation with the Doctoral Committee 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.
- d) The Chairman, Board of Studies shall approve a board of three examiners for assessment of the thesis, from among the suggested panel. 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 panel of examiners as per 14(c) above. If the external examiners are not able to assess the thesis for any reason, alternative examiners may be nominated by chairman, Board of Studies and ratified by Board of Studies later on.

- e) The title of thesis and synopsis should be submitted to the Doctoral Committee three months prior to submission of the thesis to the Board of examiners.
- f) If one of the examiners rejects the thesis, it will be referred to another examiner from among the approved panel. In case the new examiner approves the thesis, it will be considered approved. If the new examiner also rejects the thesis, the case will be referred to the arbitration committee.
- g) If one or more examiner(s) recommend revision of thesis it may be revised with major or minor changes in the thesis. After modifications the resubmission shall be done within a period to be decided by the Chairman, Board of Studies, on the recommendation of the Doctoral committee.
- h) If more than one examiners reject the thesis, the case will be referred to the arbitration committee(see below).
- i) The Ph.D Arbitration Committee shall consists of three members:
 - (i) a Faculty Member of NBRC(who is not a Member of the Doctoral Committee) duly nominated by Chairman, Board of studies. In case Chairman, Board of Studies happens to be the Supervisor of the student whose thesis has been rejected, Chairman, SAC, NBRC shall nominate the Faculty Member.
 - (ii) the respective Research Supervisor and
 - (iii) the Registrar, NBRC.This committee will discuss the case referred to it and give its recommendation to the Director.
- j) If a thesis is rejected by three or more examiners, it will stand rejected and shall not be referred to another examiner, or to the arbitration committee.
- k) If a report from any of the external examiners is not received within three months, a copy of the thesis may be sent to another examiner from amongst the approved panel.
- n) After the receipt of the satisfactory report on the thesis from all the examiners, the student will make a formal presentation of the thesis to the faculty and students of NBRC. This will be followed by a viva-voce examination which will be conducted by at least 2 members of the board of examiners out of which one will be the Research Supervisor and one external examiner.

* Under extraordinary circumstances where none of the external examiners can be present at the Viva-Voce examination, the Chairman of the Board of Studies may

appoint another external substitute examiner from the panel recommended by the Doctoral Committee.

15. AWARD OF THE INTEGRATED PH.D. DEGREE

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